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**Perceptions of the Implementation of a Whole-School Reform Model:  
All-Female Single-Sex Education**

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**Perceptions of the Implementation of a Whole-School Reform Model:  
All-Female Single-Sex Education**

**by**

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**Treatise**

Presented to the Faculty of the Graduate School of  
The University of Texas at Austin  
in Partial Fulfillment  
of the Requirements  
for the Degree of

**Doctor of Education**

**The University of Texas at Austin  
May 2013**

## **Dedication**

I dedicate this to my beautiful mother, Betsy. Mom, you are classy, intelligent, loving, hard-working, fiercely independent, and tenacious. I am the woman you see today because of your love, support, and guidance. Thank you for teaching me **never** to settle and to believe that I deserve all of my wildest dreams.

I also dedicate this to my father, Jim. Dad, you have been by my side through this entire journey. This road has come with many challenges, but the knowledge that you were there to help me if I faltered gave me the courage to charge on. Thank you for believing that I could do this and for making me believe it, as well.

I love you both more than I can ever put into words.

## **Acknowledgements**

When I began this journey, I was told that pursuing a doctorate is a selfish endeavor that cannot be accomplished without a steadfast support system. I am eternally grateful to my family, friends, and loved ones for their unwavering support, guidance, and understanding. I would not be here without you.

I would like to thank the members of my committee for giving of their time to review and evaluate my work. I owe a special word of gratitude to my chair, Dr. Rubén Olivarez, for accepting the task of chairing my committee and for always encouraging me to “Charge on!” I am also indebted to Dr. Martha Ovando for her guidance and support on my journey to “San Antonio”. Finally, I am incredibly grateful to Dr. Cathy Jones for her reassurance and advice.

This accomplishment would not be possible without the professional support of Mr. Andrew Kim and Mrs. Annette Villerot. I am also grateful for the camaraderie and encouragement I have received from my beloved CSP cohort 22, CSP cohorts 21 and 23, and the SFA Doctoral Cohort 14.

Finally, I would be remiss if I did not express my undying gratitude to the people who are closest to my heart. Thank you to my mom, dad, step-parents, and sisters for standing by my side. Thank you to my best friends, Jenn and Tamara, for loving and accepting me (and my many faults). Thank you to Molly Beth for being my pace car through the dissertation process. Thank you to Mike for helping me to believe in myself and for giving me the motivation to pour my heart and soul into this program. And thank you to the University of Texas at Austin for allowing me to be a part of an institution that thrives on the belief that, “What starts here changes the world.” My world is forever changed.

# **Perceptions of the Implementation of a Whole-School Reform Model: All-Female Single-Sex Education**

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The University of Texas at Austin, 2013

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The purpose of this study was to explore the implementation experiences of school leaders and teachers in a public, all-female, single-sex campus that experienced successful student outcomes. This research examined the participants' views of the factors that influence successful implementation of this model. Three research questions guided the study: (1) What are stakeholder perceptions of the factors that influenced the successful implementation of an all-female, single-sex, whole-school reform? (2) What are stakeholder perceptions of the successes experienced during the successful implementation of an all-female, single-sex, whole-school reform? (3) What are stakeholder perceptions of the challenges to the successful implementation of an all-female, single-sex, whole-school reform?

This qualitative study used a grounded theory approach and a case study design to examine the implementation of whole-school, single-sex reform on a campus that experienced successful student outcomes, as evidenced by receiving the highest rating from the state accountability system in 2010-2011. Participants for this study were selected through purposive, theoretical sampling using a referral technique to generate the

participant pool. Data were collected through semi-structured interviews, an open-ended questionnaire, and a review of documents. To produce a substantive theory, data analysis followed the open, axial, and selective coding processes outlined by Strauss and Corbin (1990).

The participant perceptions and major findings were analyzed to determine the relationships between causal conditions in order to develop theoretical explanations about the factors that influenced the implementation. The major factors influencing the implementation of the all-female, single-sex campus in this study were: (1) Community, (2) External factors, (3) District-level factors, and (4) School-level factors. The data and findings from this research were used to generate a substantive theory regarding the factors that influence successful implementation of this model so that leaders in public school districts may have a greater knowledge base with which to augment the decision-making process when considering the implementation of all-female, single-sex campuses as a whole-school reform model. Also, districts planning to implement this model may use the findings as a guide when considering the factors in their own districts that may influence implementation.

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## **CHAPTER ONE**

### **INTRODUCTION**

Across the nation, there is growing dissatisfaction with American public schools as a result of low student achievement, particularly among minority and at-risk students (Salamone, 2003). The worsening social and political state of American public schools has given rise to increasingly stringent systems of accountability and a strengthening belief in the effectiveness of research-based comprehensive reform strategies (Datnow, 2000). The contemporary emphasis on research-based, whole-school reform has roots in the 1994 changes to Title I legislation which expanded federal funding to support whole-school projects and reforms in response to research showing that individual and pullout programs were not effective in increasing student achievement (Rowan et al., 2004). This shift toward whole-school reform efforts was further amplified in 1997 by the passage of the Comprehensive School Reform Demonstration Act, which authorized the spending of up to \$145 million to provide individual schools with up to \$50,000 to implement comprehensive designs for school improvement. Funding for the program was subsequently expanded to \$310 million with the passage of No Child Left Behind (NCLB) in 2001 (Datnow, 2000; Desimone, 2002; Rowan et al., 2004).

As the comprehensive school reform movement gained momentum, the passage of the No Child Left Behind Act also played a major role in the development of the educational reforms, including the movement for public single-sex public education. Subchapter V of NCLB, entitled “Promoting Informed Parental Choice and Innovative Programs,” included a provision allowing federal funds to be made available to local public schools for the purpose of implementing and sustaining innovative educational

programs, including the creation of single-sex classes and schools (McDowell, 2006). However, funding was not immediately available because the proposal was a direct violation of the anti-discrimination stipulations of Title IX and could not be fully realized until a 2006 amendment to the legislation. The amendment to Title IX, as a part of the No Child Left Behind Act, partially deregulated previous restrictions and allowed funding for innovative educational programming, including single-sex schools and single-sex programs within existing coeducational schools (Bigler & Signorella, 2011).

As public school districts across the nation continue to search for whole-school reform models to raise student achievement, single-sex programming has emerged as a possible solution, propelled by supporters of the educational theory that gender-specific school reforms address pedagogical and developmental needs determined by gender (National Association for Single-Sex Public Education [NASSPE], 2012). As a result, the movement for implementing single-sex reform models is rapidly gaining momentum, particularly in urban settings and for all-girl environments (Chadwell, 2010). According to data published by the National Association for Single-Sex Public Education (2012), the number of public schools offering single-sex educational opportunities was roughly a dozen schools in 2002 and has risen to at least 506 public schools in 2011. Of those schools, the association reports that 116 out of 506 schools qualify as single-sex campuses, meaning that student enrollment is limited by gender (NASSPE, 2012). Due, in part, to positive research findings on all-female environments (Salamone, 2003), implementation of all-female campuses is occurring at a faster rate. Data from 2011 indicates that among the 116 public, single-sex campuses nationwide, 67 were all-female, 44 were all-male, and 5 were dual academies (NASSPE, 2012). Despite the rapid growth

of all-female, single-sex campuses, there is much to be learned about the factors that affect successful implementation of this model.

### **Research on Implementation**

Educational research has largely focused on examining outcomes of reform. However, there is research to suggest that the success or failure of any school reform model is largely dependent upon implementation (Datnow & Stringfield, 2000; Desimone, 2002). In the context of school reform, implementation can be understood as the process of selecting, planning for, and enacting a program or model of reform. Datnow and Stringfield (2000) state:

We know that the improvement of schools is possible when the reform effort is well thought out, when teachers are active agents in the change process, when there are sufficient resources and time to support reform, when capable leadership is present, and when school cultures change along with school structures. (p. 192)

Although there is limited evidence to either fully support or reject the merits of single-sex education as a model of school reform (Bigler & Signorella, 2011; Herr & Arms, 2004; Mael, 1998; Mael et al., 2005; Warrington & Younger, 2003), Warrington & Younger (2003) suggest that the success of single-sex reforms is equally dependent upon implementation. An English study in 2003 detailing an unsuccessful single-sex initiative revealed that implementation occurred in an “ad hoc” fashion, with little preparation or evaluation (Warrington & Younger, 2003). However, a 2000 report detailing single-sex classes in the United Kingdom concluded that single-gendered environments provide a positive and successful experience for students when there is positive, collaborative implementation and staff commitment to the initiative (Sukhnandan et al., 2000).

This chapter includes the statement of the problem and purpose of the study, the research questions to be studied, a brief overview of the methodology, including definition of terms, delimitations, limitations, and assumptions, and the significance of the study.

### **Statement of the Problem**

One of the most rapidly developing areas in school improvement research examines the relationship between the implementation and outcomes of whole-school reform models (Datnow, Hubbard, & Mehan, 1998; Datnow, 2000; Datnow & Stringfield, 2000; Datnow, Borman, Stringfield, Overman, & Castellano, 2003; Desimone, 2002; Rowan, Barnes & Camburn, 2004). The existing research focuses on specific reform models that grew from the Comprehensive School Reform Demonstration Act, such as Accelerated Schools Project, Co-NECT Schools, Expeditionary Learning Outward Bound, and Modern Red Schoolhouse, among others (McChesney & Hertling, 2000). To date, however, there is limited research investigating the implementation of public, single-sex, whole-school reform models (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). Although research on the effectiveness of single-sex education has been both limited and inconclusive (Datnow, Hubbard, & Conchas, 2001; Mael et al., 2005; Warrington & Younger, 2003), districts across the nation continue to implement whole-school, single-gender programs, with a higher number of all-female models being implemented nationally (Bradley, 2006; Chadwell, 2010). In the absence of a recognized framework regarding the implementation of single-sex programs, single-gender reform programs are often introduced without adequate preparation, leaving schools unprepared to undertake the necessary steps to provide truly effective single-sex

education (Hanover Research, 2012). As the implementation of whole-school, all-female, single-sex models continues to grow in American public schools, there is an increasing need to focus on the implementation of single-sex reform efforts by successful prototypes (Datnow et al., 1998) to gather descriptive data that will contribute to a better understanding of the complexities associated with single-sex implementation (Datnow et al., 1998; Williams Harris, 2009).

### **Purpose of the Study**

Research regarding the successful implementation of all-female, single-sex education as a whole-school reform model is limited (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). Therefore, the purpose of this study was to explore the implementation experiences of school leaders and teachers in a public, all-female, single-sex campus that has experienced successful student outcomes, as evidenced by receiving the highest rating from the state accountability system in 2010-2011. This research examined the participants' views of the factors that influence successful implementation of this model.

### **Research Questions**

This research study was guided the following research questions:

1. What are stakeholder perceptions of the factors that influenced the successful implementation of an all-female, single-sex, whole-school reform?
2. What are stakeholder perceptions of the successes experienced during the implementation of an all-female, single-sex, whole-school reform?
3. What are stakeholder perceptions of the challenges to the successful implementation of an all-female, single-sex, whole-school reform?

## **Overview of the Methodology**

This qualitative study used a grounded theory approach and a case study design to examine the implementation of whole-school single-sex reform on a campus that experienced successful student outcomes, as evidenced by receiving the highest rating from the state accountability system in 2010-2011. The intent of a grounded theory study is to move beyond a description of a phenomenon towards the generation of a theory of actions, interactions, or processes revealed through interrelating categories of information developed through a constant comparative analysis of data collected from individuals who experienced the phenomenon (Creswell, 2007).

Creswell (2007) describes case study research as a qualitative approach in which the investigator explores a bounded system over time through detailed, in-depth data collection involving multiple sources of information and reports a case description and case-based themes. This method was chosen to ensure a thorough examination of stakeholder perspectives regarding the implementation of single-sex education as a whole-school reform model on a successful prototype campus (Datnow et al., 1998).

In order to study the phenomenon of implementation of single-sex education as a whole-school reform model, the bounded system, or case, in this study was an all-female, single-sex campus (Merriam, 2009). Participants for this study were selected through purposive, theoretical sampling (Merriam, 2009), as they need to have experienced the implementation of the single-sex reform. Data were collected through semi-structured interviews, an open-ended questionnaire, and a review of documents. The researcher utilized a referral, or “snowballing”, technique to generate the interview candidate pool. Interview sessions were audio taped and later transcribed. To produce a substantive

theory, data analysis followed the open, axial, and selective coding processes outlined by Strauss and Corbin (1990).

### **Definition of Terms**

Advanced Placement [AP] - Program in the United States created by the College Board offering college-level curriculum and examinations to high school students.

Advancement Via Individual Determination [AVID] – A nationwide college readiness program that focuses on providing research-based instructional and learning strategies. Students enrolled in the AVID program are required to take at least one advanced-level course and participate in an elective period that provides tutoring. Teachers on campuses that offer AVID have the opportunity to participate in a weeklong summer professional development institute.

Coeducational [CE] – An educational setting that offers a heterogeneous grouping of males and females.

Comprehensive School Reform Model – A whole-school reform model that received federal funds as a result of participation in the Comprehensive School Reform Program. Throughout the literature, comprehensive and whole-school are used interchangeably; however, for the purposes of this study, the term “whole-school reform model” will be used in all cases, unless specifically referring to a model that participated in the Comprehensive School Reform Program.

Comprehensive School Reform Program (*Formerly known as the Comprehensive School Reform Demonstration*)– A federal program that began in 1998 and was authorized as Title I, Part F of the Elementary and Secondary Education Act. The goal of the program was to raise student achievement by assisting public schools by

funding the implementation of comprehensive school reforms that were based upon research-based practices. Schools receiving funding were required to implement eleven components of comprehensive school reform. One of the eleven components required a “reform plan designed to enable all students to meet challenging state content and performance standards” (Tushnet, Flaherty, & Smith, 2004), which excluded single-sex whole-school reform models. Formula grants for the program ended in 2007.

Gifted and Talented [G/T] - The federal Elementary and Secondary Education Act defines gifted and talented students as, “Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities,” (Title IX, Part A, Definition 22, 2002).

Implementation – The process of putting an adopted reform into practice. For the purposes of this study, selection of a reform model and planning processes are considered a part of implementation.

Laying the Foundation [LTF] - A weeklong teacher training program that includes Pre-AP and AP teacher training, support, lessons, and classroom materials focused on improving student performance and creating a college-ready culture.

Memorandum of Understanding [MOU] – An agreement outlining a partnership between two or more parties. For the purposes of this study, it is assumed that one of the parties is a public school district.



No Child Left Behind [NCLB] – The 2001 reauthorization of the Elementary and Secondary Education Act [ESEA] of 1965. NCLB required states to set standards for student performance and teacher quality, establishing accountability for results (U.S. Department of Education [USDOE], 2004). Title V, Part A allowed funds to be made available to local educational agencies to be used for “innovative assistance programs, which may include...programs to provide same-gender schools and classrooms (consistent with applicable law)” (NCLB, 2002). The phrase “consistent with applicable law,” implicitly acknowledged that Title IX restricted the instances in which “same- gender schools and classrooms” could exist. Subsequent amended regulations to Title IX, which took effect in 2006, made it easier for schools to offer single-sex educational programs (USDOE, 2006).

Single-Sex Education [SS] - An educational setting that offers a homogeneous grouping based on gender. For the purpose of this study, the terms single-sex, single-gender, and same-sex will be used interchangeably.

Successful Student Outcomes – For the purpose this study, successful student outcomes refers to a campus that received the highest rating [Exemplary] on the 2011 Texas state accountability system, which describes successful student outcomes in the area of academic achievement. The 2011 accountability rating was used as the selection criteria because public campuses and districts in Texas were not assigned accountability ratings in 2012 due to the change in the Texas state assessment system from the Texas Assessment of Knowledge and Skills [TAKS] to the State of Texas Assessments of Academic Readiness [STAAR].

Title IX of the Education Amendments of 1972 – This legislation protects people from discrimination based on gender in education programs and activities that receive federal financial assistance (USDOE, National Center for Education Statistics [NCES], 2011). A 2006 amendment to the legislation, as a part of NCLB, allowed for previously withheld funding as a result of Title IX to be allocated for single-sex schools and single-sex programs with existing coeducational schools (Bigler & Signorella, 2011).

University Interscholastic League [UIL] - An organization that establishes rules for and presides over most athletic, music, and academic contests for public schools in Texas.

Whole-School Reform Model – A whole-school educational program designed to improve student achievement by employing research-based methods for student learning, teaching, and school management. Whole-school reform models intend to restructure and re-culture the entire school.

### **Limitations**

Although researchers are generally hesitant to generalize the findings from case study research, a grounded theory study strives to create a theory with specific components: central phenomenon, causal conditions, strategies, conditions and context, and consequences (Creswell, 2007). Therefore, the findings are limited by the transferability of the study. A second limitation of this study was the potential for selective or altered recall by study participants. Those selected to participate in the study were asked to reflect upon their experiences from the implementation of a whole-school single-sex reform model, which occurred several years in the past. It is possible that

participants' recall may only depict selected experiences or that perceptions may have altered over time.

### **Delimitations**

Although there are public schools across the nation that have implemented whole-school, all-female, single-sex reform and who have also garnered successful student outcomes, this study focused on one public single-sex, all-female secondary school in Texas. This study only addressed the implementation of an all-female, single-sex campus and did not include single-sex programs within coeducational settings. Finally, the study only examined the perspectives of adult stakeholders consisting of school leaders and teachers who experienced the implementation. Two of the teacher participants also had daughters attending the campus and were able to offer a parent perspective. The perspectives of student or community stakeholders were not examined.

### **Assumptions**

This case study proceeded under three assumptions. First, the researcher assumed that public school districts employ processes to implement all-female, single-sex campuses as a whole-school reform model. Second, the researcher assumed that all-female, single-sex education has the potential to produce successful student outcomes and that these outcomes may be influenced by the process of implementation. Finally, the researcher assumed that participants in both interviews and open-ended questionnaires were open and honest about their experiences and perceptions regarding the implementation of whole-school single-sex reform at the case study school.

## **Significance of the Study**

This study documented the perceptions of stakeholders involved in the implementation of an all-female, single-sex, whole-school reform model. There is a demonstrated gap in research on this topic for both all-male and all-female environments (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001); however, this study was designed with the purpose of providing findings that will contribute to the body of research on all-female environments, which are more prevalent. Furthermore, the data and findings from this research were used to generate a substantive theory regarding the factors that influence successful implementation of this model so that leaders in public school districts may have a greater knowledge base with which to augment the decision-making process when considering the implementation of all-female, single-sex campuses as a whole-school reform model (Desimone, 2002; Datnow, Hubbard, & Conchas, 2001). This research may also inform legislators who wish to determine whether to appropriate funding for the implementation of all-female, single-sex designs as a model of reform.

## **Summary**

The implementation of whole-school reform designs is occurring at an unprecedented rate in the United States (Datnow, et al., 2003; Rowan et al., 2004). Single-sex education continues to gain in popularity as a whole-school model of reform and a means of improving academic achievement for both male and female students (Bigler & Signorella, 2011). While there is a substantial body of research regarding successful implementation of whole-school reform (Datnow, Hubbard, & Mehan, 1998; Datnow, 2000; Datnow & Stringfield, 2000; Datnow, Borman, Stringfield, Overman, &

Castellano, 2003; Desimone, 2002; Rowan, Barnes & Camburn, 2004), there is a need for additional research regarding the implementation of single-sex designs as a whole-school reform model (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). The findings from this study will add to the body of research regarding implementation of all-female, single-sex, whole-school reform models.

## **CHAPTER TWO**

### **REVIEW OF THE LITERATURE**

The purpose of this chapter is to review the literature related to whole-school reform and the implementation of single-gender education. The chapter is divided into five sections. Section One provides an overview of the history and research related to whole-school models of reform. Section Two reviews existing frameworks for the analysis of whole-school reform model implementation. Section Three examines the research on the implementation of whole-school reform models. Section Four presents an overview of single-sex education, with a focus on the history, legislation, research and issues related to single-sex public education in the United States and provides a rationale for additional research on single-sex whole-school reform models. Section Five summarizes the review of literature and provides an introduction to Chapter Three.

#### **Overview of Whole-School Models of Reform**

In the late 1990s, the whole-school reform movement gained popularity as a means of school improvement in the United States. Whole-school reform is based on the idea that, instead of having multiple programs with different strategies and goals, schools should adopt a coherent vision focused on changing the “whole school” (Vernez et al., 2006). Although this process typically begins with a school’s decision to adopt a research-based model or design, research asserts that the adoption of a particular model or design does not necessarily guarantee success (Rowan et al., 2004). Whether a school selects a “home grown” or national model of whole-school reform, the model represents one variable in the equation. The bottom line is that “models must be implemented to be effective” (Berends et al., 2002). As the popularity of whole-school reform grew,

researchers began to shift their attention to implementation studies to determine why some models were successful, while others struggled (McChesney & Hertling, 2000). Numerous nationwide and longitudinal studies on whole-school reform implementation yielded vastly different results, but were ultimately used by researchers to develop frameworks of analysis for implementation of reform. In addition to highlighting existing frameworks, a review of the literature on whole-school reform highlights four categories of factors affecting implementation: (1) School-level factors, (2) Design-related factors, (3) District-level factors, and (4) External factors.

### **Growth of Educational Research & the Demand for Research-Based Practices**

In 1954, the United States Congress passed the Cooperative Research Act authorizing the U.S. Commissioner of Education to partner with colleges, universities, and other state agencies for the purpose of conducting research in the field of education (Knox, 1971). This marked the beginning of the federal government's role in educational research. As the United States became increasingly embroiled in the space race with the Soviet Union, the launch of the Soviet shuttle, Sputnik, in October of 1957 was seen as a major failure on the part of American schools, suggesting that our students were being outperformed by those in the Soviet Union (Lee, 2005). Public concern over the Soviet success created waves through the American education system. During the late 1950s, appropriations for research activities from the U.S. Office of Education nearly tripled (Knox, 1971). In addition, Americans called on the public school systems to improve student achievement and skills in math, science, and foreign languages, concentrating efforts on promoting excellence among high-achieving students (Lee, 2005). Huge

amounts of money were poured into large-scale curriculum reforms, such as PSSC Physics, BSCC Biology, and MACOS Social Sciences (Fullan, 2009).

The Civil Rights movement of the 1960s and 1970s prompted a wave of education reform that focused on achieving equity by helping disadvantaged students through programs, such as Title I of the Elementary and Secondary Education Act (Lee, 2005). The education system was viewed as one of the primary vehicles for reducing social inequality, though progress occurred in pockets rather than in a large-scale fashion as hoped (Fullan, 2009). In the 1980s, education reform experienced another shift. In 1983, the Nation at Risk report called for systemic changes in American schools, shifting attention away from meeting the needs of disadvantaged students, and back to producing high achieving students (Lee, 2005). Urgent cries for reform resulted from the belief that the educational system was not preparing students to be competitive in the global society (Fullan, 2009). This shift came just as research began to suggest that the targeted “pull out” programs funded by Title I showed no positive effect on student achievement in high poverty schools. Instead, studies showed that these programs stigmatized students and resulted in uneven instruction due to reduced time in class with peers (Rushnet, Flaherty, & Smith, 2004).

The 1990s welcomed two major changes in the American education system. First, in an effort to balance the goal of equity from the 1960s and 1970s with the goal of excellence from the 1980s, Americans called on states to set high academic standards for all students regardless of socioeconomic, racial, or linguistic background (Lee, 2005). And second, due to the negative findings on Title I-funded pull out programs, school



systems also began to abandon piecemeal programming to look at school-wide, systemic improvements for all students (Waters, 1999).

In 1994, President George H.W. Bush invited the governors from all fifty states to participate in the Goals 2000: Education America Act summit. The result of this summit included the articulation of goals for the American education system, as well as a mandate for accountability in grades 4, 8, & 12 (Lee, 2005). While the intent of this increased accountability was to help ensure equal access to high academic standards for all students; in many cases, it only served to shine a spotlight on the weaknesses within the education system. As the 1990s progressed, the American public grew increasingly dissatisfied with low student achievement and the inability of public schools to meet high standards of accountability (Datnow, 2000).

The late 1990s are characterized by a perception of declining quality in American schools. Fullan (2009) states that:

There is really not much to say about the U.S. in this period. There was no national strategy, no explicit use of change theory, and aside from a successful school district here and there, there was no progress. In fact, ...take as a reference point the gap between low and high performing children in the U.S., which has been moving backward since 1980, [and] continued to do so [in the late 1990s].  
(p. 105)

A strong belief in the effectiveness of research-based reform coupled with a growing demand for the American education system to address the persistent failure of some schools set the stage for the wave of whole-school reforms (Datnow, 2000; Rushnet, Flaherty, & Smith, 2004).

## **Legislation and the Birth of the Whole-School Reform Movement**

In response to the demand for widespread school improvement, schools across the nation began to adopt whole-school models of reform to foster changes in teaching, learning, and student success. Whereas past efforts were largely programmatic in nature, whole-school reform focused on “improvement for entire schools, rather than on particular populations of students within schools” (Desimone, 2002, p. 434).

The whole-school reform movement was also fueled by the evolving Title I program, beginning with changes in 1988 and again in 1994 that broadened Title I funding to support school-wide projects and reforms in response to the growing consensus that the most effective reforms involve whole schools, not individual students or classrooms (Datnow, 2000; Desimone, 2002; Rowan et al., 2004). The crusade for school-wide reform was further augmented by the passage of the Comprehensive School Reform Demonstration Act in 1997, offering additional federal funds to schools that adopted whole-school reforms (Desimone, 2002; Lee, 2005). The initial legislation gave state education agencies \$145 million in the 1998 fiscal year (Datnow, 2000; Desimone, 2002; Lee, 2005; Rowan et al., 2004), of which \$120 million was specifically earmarked for allocation to Title I schools (Desimone, 2002). Individual schools were provided with up to \$50,000 a year for up to three years to implement whole-school, or “comprehensive”, designs for improvement (Datnow, 2000; Desimone, 2002; Lee, 2005; Rowan et al., 2004). Approximately 1,800 public schools received grants under the Comprehensive School Reform Demonstration [CRSD] Act in 1998-1999. In an effort to expand the program by one thousand schools, Congress increased funding by an additional \$75 million in the year 2000 (Desimone, 2002). The passage of NCLB raised

CSRD appropriations to \$310 million in 2002 (Datnow, 2000; Desimone, 2002; Lee, 2005; Rowan et al., 2004). NCLB also dropped the term “demonstration” from the act, at which point it became known as the Comprehensive School Reform, or CSR, program (Datnow, 2000).

Although the legislation outlined specific criteria that a CSR model must meet, there was also a great deal of flexibility provided by allowing districts to choose either a locally developed model based on research or an external model with technical support by a CSR provider (Carlson & Buttram, 2004). The legislation did provide a list of seventeen CSR models, but schools were not forced to select exclusively from those models (Desimone, 2002). Schools awarded formula grants for CSR implementation were at liberty to select or design any model of reform, as long as it fell within the guidelines outlined by the U.S. Department of Education (Lee, 2005).

According to the NCLB update, schools receiving formula grants under the CSR program must adopt models that address the following components:

1. Proven methods and strategies for student learning, teaching, and school management that are based on scientific research and effective practices and have been replicated successfully in schools with diverse characteristics;
2. Comprehensive design for effective school functioning, integrating instruction, assessment, classroom management, and professional development and aligning these functions into a school-wide reform plan designed to enable all students to meet challenging state content and

performance standards and address all needs identified through a school needs assessment;

3. High quality and continuous teacher and staff professional development and training;
4. Measurable goals for student performance and benchmarks for meeting those goals;
5. Support for school faculty, administrators and staff (Added in 2001);
6. Meaningful involvement of parents and the local community in planning and implementing school improvement activities;
7. High-quality external support and assistance from a comprehensive school entity (which may be a university) with experience in school-wide reform and improvement;
8. Plan to evaluate the implementation of school reforms and the student results achieved;
9. Identification of how other available resources (federal, state, local, or private) will help the school coordinate services to support and sustain the school reform; and
10. Scientifically based research to significantly improve the academic achievement of students participating in such programs as compared with students in schools who have not participated in such programs or strong evidence that such programs will significantly improve the academic achievement of participating children. (Added in 2001) (USDOE, 2002)

In the years immediately following the update to the CSR program, hundreds of reform models were developed and adopted by thousands of schools, most often using federal funds provided by the CSR program and/or Title I. By the year 2006, over 8,000 public schools adopted a CSR model, using more than \$2 billion of federal funds to implement programs in mostly low-income schools (Vernez et al., 2006). In 2008, however, the CSR program lost all funding and could no longer award formula grants. Funding was only appropriated to the CSR Clearinghouse, which provides support for schools participating in CSR activities (USDOE, 2009, November 12).

### **The Current Status of Whole-School School Reform**

Even in the absence of federal funding from the Comprehensive School Reform program, whole-school reform is alive and well in the United States. Along with Title I funding, whole-school models are often funded through private corporations and other private investments (Desimone, 2002; Peurach, 2012, February 29; Vernez et al., 2006). Leading programs, such as Success for All and America's Choice, continue to thrive, having established networks of schools with positive outcomes (Peurach, 2012, February 29).

Preliminary drafts of the reauthorization of the Elementary and Secondary Schools Act [ESEA] (or NCLB, in its latest iteration), suggest that whole-school reform is on the agenda. Peurach (2012, February 29) notes that:

Draft ESEA legislation approved late last year by the Senate Health, Education, Labor, and Pensions Committee identifies six strategies for improving the nation's lowest performing schools. Two of the strategies – the 'whole-school reform' strategy and the 'restart' strategy, which involves re-launching a failing

school in a charter, magnet, or other ‘innovative’ format – would provide federal support for schools and districts to collaborate with external partners with a record of success either in re-engineering existing schools or creating new schools. Potential partners include external ‘hub’ organizations, such as comprehensive-school-reform providers, charter management organizations, and education management organizations. (Paragraph 3)

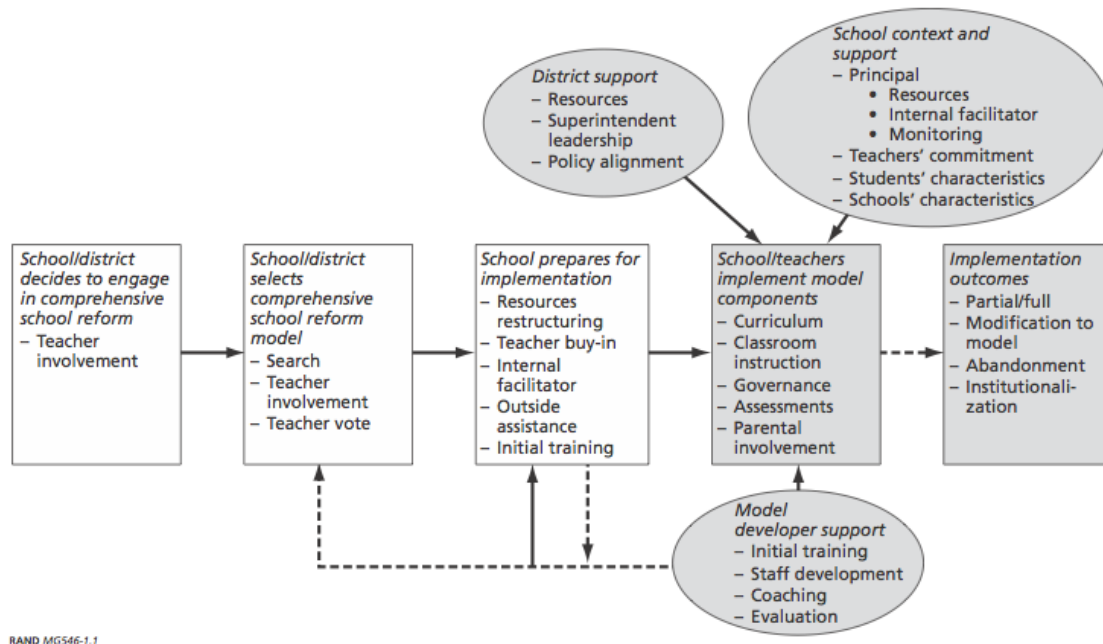
Although it is uncertain when Congress will complete the next reauthorization, educational reformers are delighted about the prospect of continued funding for whole-school reform (Peurach, 2012, February 29).

### **Existing Frameworks for Analysis of Whole-school Reform Model Implementation**

With federal funding allocations in the billions and thousands of schools selecting whole-school reform as a means of improving student learning, there has been a significant number of studies dedicated to researching the implementation of whole-school models of reform (Berends et al., 2001; Carlson & Buttram, 2004; Datnow & Stringfield, 2000; Datnow et al., 2003; Desimone, 2002; Rowan et al., 2004; Vernez et al., 2006). Research on whole-school reform suggests that successful implementation relies on a multitude of factors (Vernez et al., 2006). As a result of numerous studies, several frameworks of analysis of whole-school reform model implementation have been developed. The frameworks in this review include (1) the Framework of Analysis of Process of CSR Model Selection and Implementation from the 2006 study by Vernez, Karam, Mariano, & Demartini (2006), (2) the Conceptual Framework for Analyzing Progress and Performance in National American Schools [NAS] from the 2001 study by

Berends, Kirby, Naftel, & McKelvey (2001), and the “Normative” Model of CSR as a Continuous Process from a 2004 review by Rowan, Barnes, & Camburn (2004).

**Framework for analysis of process of CSR model selection and implementation.** The Framework of Analysis of Process of CSR Model Selection and Implementation, used in the study by Vernez, Karam, Mariano, & Demartini (2006), conceptualizes whole-school implementation as a linear process (Figure 1). The process begins with a decision by the school or district to participate in whole-school reform. This step may or may not involve teachers in decision-making. The school or district, with or without input from the other, researches models and makes a selection, with or without teacher involvement or approval. After selecting a model, the school prepares for implementation by considering issues, such as resources, restructuring, teacher buy-in, whether to use an internal facilitator or outside assistance, and initial training. The next step is the actual implementation, which includes curriculum, instruction, governance, assessments, and parental involvement. Implementation is affected by three elements: (1) district support, (2) school context and support, and (3) model developer support (Vernez et al., 2006).

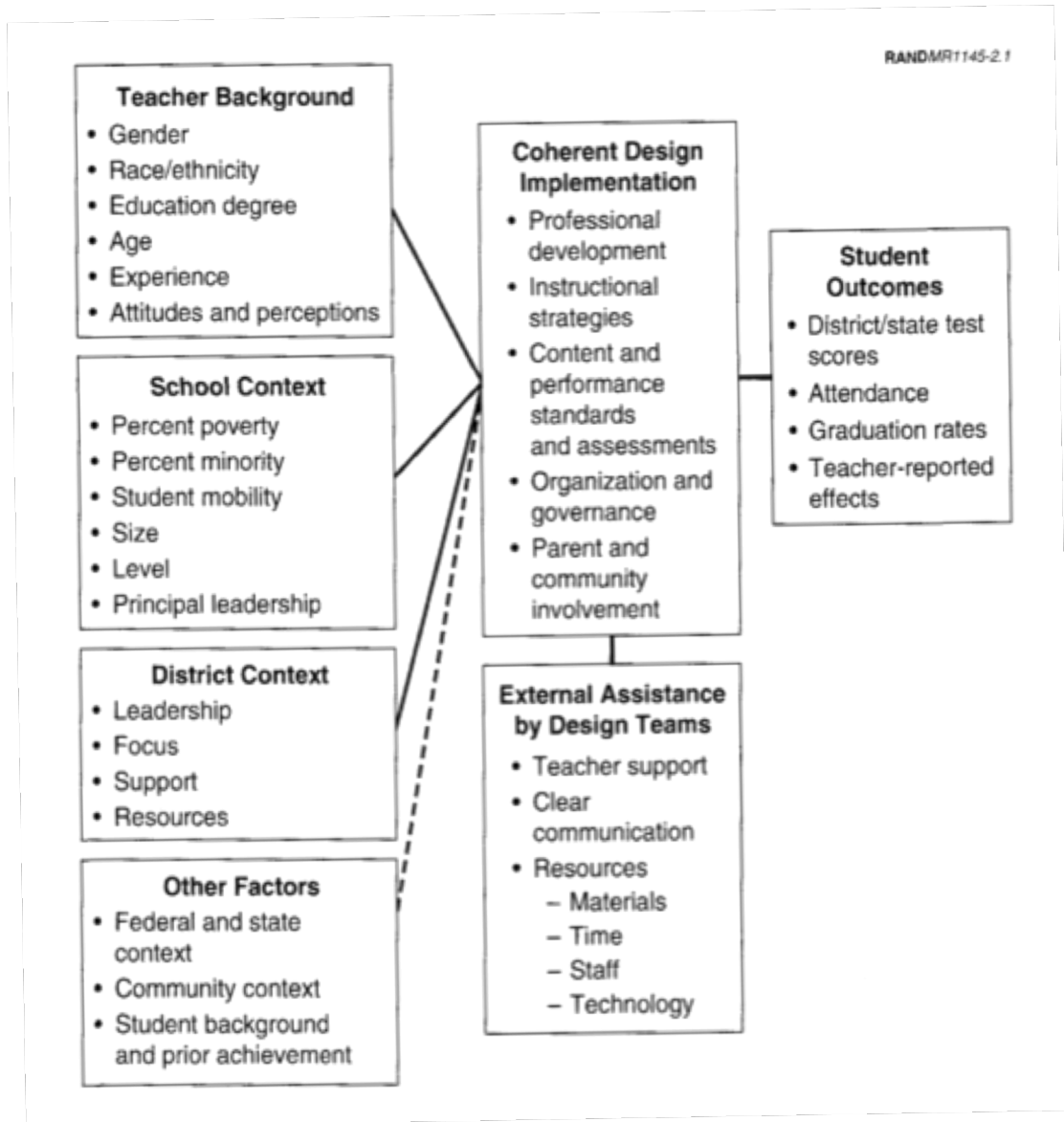


**Figure 1: Framework of Analysis of Process of CSR Model Selection and Implementation (Vernez, Karam, Mariano, & Demartini, 2006, p. 9)**

**Framework for analyzing implementation progress & performance.** The Conceptual Framework for Analyzing Progress and Performance in National American Schools [NAS] used by Berends, Kirby, Naftel, & McKelvey (2001) draws from literature by Michael Fullan to visualize four categories of factors that affect whole-school implementation (Figure 2). Factors such as teacher background, school context, district context, and characteristics external to the system all affect the implementation of whole-school design. The elements of implementation in this framework include professional development, instructional strategies, content and performance standards and assessments, organization and governance, and parent and community involvement. In concert with the actions during model implementation are the actions of the external design team. During implementation, they provide teacher support, ensure clear

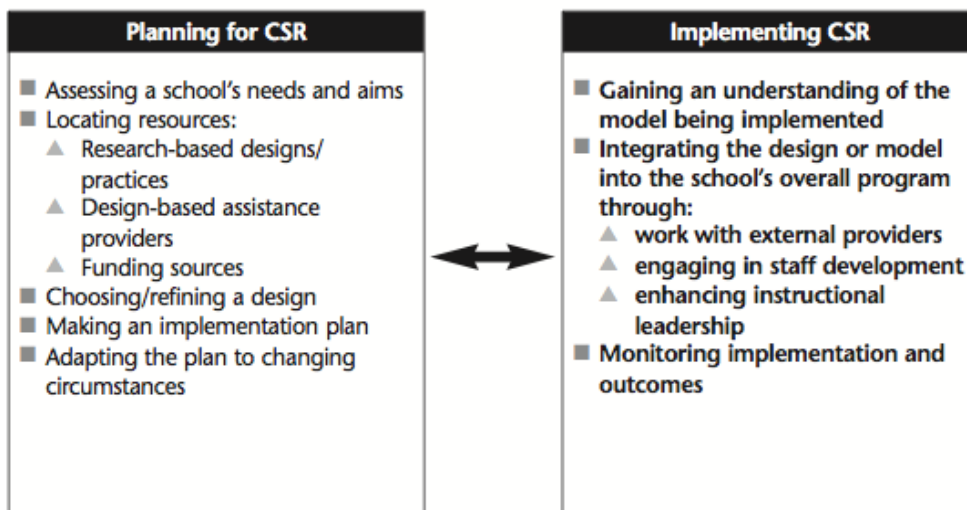


communication, and help to ensure resources, such as materials, time staffing, and technology (Berends et al., 2001).



**Figure 2: Conceptual Framework for Analyzing Progress and Performance in NAS Schools (Berends, Kirby, Naftel, & McKelvey, 2001, p. 16)**

**“Normative” model of CSR as a continuous process.** The “Normative” Model of CSR as a Continuous Process used by Rowan, Barnes, & Camburn (2004) portrays implementation of whole-school reform as a continuous process. When a school begins the process at the planning stage, activities include assessing the needs and aims of the school, locating resources, choosing a design, planning for implementation, and adjusting the plan, as needed. As a school proceeds to the implementation phase, activities include gaining an understanding of the model, integrating the design into the school’s overall program, and monitoring the implementation and outcomes. The two-way arrow suggests a cycle of implementing and revisiting the steps of assessing needs, refining the design, and adapting the plan, as needed. This framework suggests “a feedback loop that feeds information about implementation and effects on student achievement back into the planning process to produce a new cycle of planning and implementation” (Rowan et al., 2004, p. 12).



**Figure 3: “Normative” Model of CSR as a Continuous Process (Rowan, Barnes, & Camburn, 2004, p. 12)**

## **Research on Factors Affecting Implementation of Whole-School Reform Models**

As districts continue to turn to whole-school models of reform, the focus of school improvement research has turned to examining the implementation, outcomes, and sustainability of these reforms (Datnow et al., 2003; McChesney & Hertling, 2000). One area of concern is the identification of successful implementation strategies, but only a few studies have examined the contextual variables that influence successful implementation of whole-school reform models (Desimone, 2002). It should also be noted that much of this research focuses on the most widely disseminated models, but many other whole-school reform models exist, some locally developed (Rowan et al., 2004). Overwhelmingly, implementation studies on whole-school reform report that there is a great deal of variation in the level and consistency of implementation of whole-school design models, both within and between schools (Desimone, 2002).

There are several existing implementation studies that have identified categorical variables that affect implementation of whole-school reform models. A 2001 study by Berends, Kirby, Naftel, and McKelvey identified four factors affecting implementation: (1) Teacher's perception, (2) School characteristics, (3) Designs and design team assistance, and (4) District support (Berends et al., 2001). A follow-up study by Berends, Bodilly, and Kirby in 2002 identified additional factors, such as the selection and matching process and the capacity for school leaders and teachers to carry out the reform (Berends et al., 2002). A study by Carlson & Buttram (2004) divided factors affecting implementation into four categories: (1) Teacher factors, (2) School factors, (3) External factors related to the model, and (4) External factors, such as state-level and mandated testing programs. Finally, a 2006 study identified the variables associated with

successful whole-school reform implementation as: (1) Principal leadership, (2) Teacher support, (3) Student characteristics, (4) School and classroom characteristics, (5) Model developer support, and (6) District support (Vernez et al., 2006).

A synthesis of the literature leads the researcher to determine that factors affecting the implementation of whole-school reform can be placed into four categories: (1) School-level factors, (2) Design-related factors, (3) District-level factors, and (4) External factors.

**School-level factors.** Research indicates that there are four school-level factors that affect the implementation of whole-school reform: (1) Leadership, (2) Resources, (3) Faculty and Staff Commitment, and (4) Context.

**Leadership.** Strong principal leadership is a major factor in the successful implementation of whole-school reform (Berends et al., 2001; Berends, Bodilly, & Kirby, 2002; Desimone, 2000; McChesney & Hertling, 2000; Rowan et al., 2004). Principals play a critical role in the implementation of whole-school reform, from helping to choose the correct design, to locating and allocating resources and providing support through professional development activities (Desimone, 2002). Teacher perceptions of strong principal leadership have been found to strongly correlate with reported levels of implementation and with levels of resources available to teacher during implementation (Berends et al., 2001). In addition to leading the change effort, principals who lead successful whole-school reforms also serve as a “buffer” from unwanted distractions or intrusions that may negatively impact implementation (Desimone, 2002; Berends, Bodilly, & Kirby, 2002). The principal also serves as an intermediary between the campus and district, working to ensure support for the reform, as well as necessary

changes in policies or procedures, when needed (Desimone, 2002; Berends, Bodilly, & Kirby, 2002). McChesney & Hertling (2000) caution that, although principal leadership is crucial in the implementation of whole-school reform, programs should not become dependent on the long-term presence of a particular leader. In order to avoid this dependence, and to make the process of implementation more manageable, many whole-school reform models encourage distributive leadership, encouraging schools to restructure by adding various instructional leadership roles to the school faculty and staff (Rowan et al., 2004).

***Resources.*** The level and adequacy of resources, such as time and professional development, clearly affect the implementation of whole-school reform (Berends et al., 2001; Desimone, 2002; Rowan et al., 2004; Vernez et al., 2006; Waters, 1999). Research suggests that a critical resource needed for successful whole-school reform is the provision of time to devote to model implementation, curriculum development, collaboration, and training (Desimone, 2002; Vernez et al., 2006). Teachers identify time as a major area of concern, stressing the need for teacher collaboration and opportunities to learn instructional strategies for integrating curricular and learning activities of the model with skills assessed by state-mandated examinations (Ross et al., 1997b). In addition, research suggests that high levels of initial and ongoing professional development affect the pace and quality of whole-school reform implementation (Desimone, 2002; Ross et al., 1997b; Rowan et al., 2004; Vernez et al., 2006; Waters, 1999). Training in new instructional methods must be offered so teachers learn how to use them effectively (Waters, 1999). Although finding time to provide high levels of professional development is a challenge (Desimone, 2002), embedded staff development

programs that are school-based, practical for school staff, rich in collaboration and problem solving, and allow teachers to learn how to implement new practices in a supportive environment have shown great success in the implementation of whole-school reform models (Rowan et al., 2004).

***Faculty and staff commitment.*** A crucial factor in adopting a new model of whole-school reform is the level of ownership on the part of administrators and teachers (Berends et al., 2001; Datnow, 2000; Desimone, 2002; Vernez et al., 2006; Waters, 1999). In particular, securing the commitment of teachers to the adopted model should be a top priority (Vernez et al., 2006), which can prove to be a challenging endeavor (Datnow, 2000). A 2006 study reported that teachers' commitment to the adopted model of reform was typically "only lukewarm" and did not seem to improve with years of experience using the model (Vernez et al., 2006), suggesting the importance of securing early buy-in from teachers. That same study also reported that principals consistently overrated their teachers' level of commitment to the reform (Vernez et al., 2006). Research suggests that methods to improve teacher commitment include encouraging active participation in decision-making, contact with design-related networks, and involvement in opportunities to collaborate (Desimone, 2002).

In addition to faculty and staff commitment, establishing a motivated, professional culture among teachers is an important consideration during the implementation of whole-school reform. Research suggests that for a reform to lead to meaningful school change, "it needs to become a part of the fabric of the school, not just another passing fad" (Datnow & Stringfield, 2000). Successful implementation of whole-school reform relies heavily on the belief systems of teachers (Berends et al.,

2001), collaboration among staff (Datnow et al., 2003), and the creation of a cooperative school culture, characterized by support, trust, and collegiality (Rowan et al., 2004).

**Context.** Whole-school reform implementation is greatly affected by the local school context (Rowan et al., 2004). When making the decision to adopt a whole-school model of reform, districts and schools must take the context and characteristics of the school into consideration. In studies that show high levels of variation in model implementation, it was attributed to the need for schools to mold reforms to suit contextual demands (Datnow, 2000). For example, low-achieving urban schools must consider issues such as mobility, lack of capacity, and inadequate resources (Desimone, 2002). Larger schools must consider the difficulty of implementing a prescriptive model due to difficulties with consistent implementation across all classrooms and grades (Vernez et al., 2006). Student characteristics such as prior student achievement and high proportions of English Language Learners may also affect the implementation of whole-school models, especially those that do not address their needs (Vernez et al., 2006).

In addition to student characteristics, decision-makers must also ensure that ambitious reform models are balanced with other change efforts. Often, schools are already “overloaded” with initiatives (Rowan et al., 2004). A lack of alignment between existing initiatives and the reform, or with state or district standards, may negatively affect the implementation of whole-school reform (Desimone, 2000; Datnow, 2000; Vernez et al., 2006).

When reforms are consistent with on-going school organization, curriculum, and instruction, the reform more easily fits into the fabric of the school and better implementation results. When comprehensive school reform makes competing

demands on teachers and students, as is commonly the case when schools must be responsive to state and district standards-based assessment regimes, implementation suffers. These inconsistencies send mixed messages, and it is unclear which mandate teachers are expected to follow. (Desimone, 2002, p. 460)

Research suggests that the presence of pressure from accountability negatively impacted the implementation of whole-school reform models, as test-preparation activities often take precedence over reform activities (Datnow & Stringfield, 2000).

In addition to school and student characteristics and existing demands, other contextual factors for consideration include the rate of teacher, student, and administrator turnover and the expected pace of the reform implementation (Desimone, 2002). In light of contextual demands, administrators and teachers should be flexible during the process of implementation, allowing for revisions of methods and processes, as needed (Waters, 1999).

**Design-related factors.** In addition to school-level factors, studies suggest that three design-related factors affect the implementation of whole-school reform: (1) Process for model selection, (2) Planning, and (3) Characteristics of the design.

***Process for model selection.*** The first step in the process for selecting a whole-school reform model is determining if a whole-school model is the appropriate choice for the campus, taking into consideration factors, such as the ability to acquire additional funding through grants to meet local needs or as an effort to improve the schools' performance in state accountability programs (Carlson & Buttram, 2004). The choice of a model can be complicated, involving dynamics, such as, the history of the school, existing conditions or constraints, school culture, and intended outcomes (Carlson &



Buttram, 2004; Datnow & Stringfield, 2000). Datnow & Stringfield (2000) add, “Schools must engage in a thoughtful, critical process of inquiry about what needs to change at their school and why before they select reforms” (p. 23). Research suggests the importance of including stakeholders, especially teachers, in the process for model selection (Datnow, 2000; Desimone, 2002; Rowan et al., 2004; Vernez et al., 2006; Waters, 1999). Although reform models are often selected by administration, without teacher input (Datnow, 2000; Vernez et al., 2006), the inclusion of teachers is critical to ensure learning needs match the proposed methods (Waters, 1999).

At the earliest stages, especially, teachers need to understand the practical demands of a reform effort, how change efforts relate to their current values and work practices, the opportunities they will be given to learn new practices, the incentives and sanctions that will be brought to bear during the change process, and so on. All of this argues for the inclusion of teachers at every step of the [model adoption] process – but especially in the early processes of needs assessment, researching alternative designs for change, selection of a design to be implemented, and choice of external agents to provide implementation assistance. (Rowan et al., 2004, p. 15)

In addition to the deliberate inclusion of teachers in the process of selection, ensuring adequate amounts of time to examine and select the appropriate model is important. Research suggests that pressures from accountability or mandates for drastic improvement often leave schools without adequate time, causing them to choose the most easily implementable program, instead of the most effective (Datnow & Stringfield, 2000). Research also suggests that educators involved the process of selecting whole-

school reform models often feel uninformed and rushed (Berends & Bodilly, 1998; Consortium for Policy Research in Education, 1998; Stringfield & Ross, 1997).

Determining the “fit” of the model is of crucial importance in the selection process (Datnow, 2000; Datnow & Stringfield, 2000; Desimone, 2002; Ross et al., 1997a; Rowan et al., 2004). Allowing for appropriate length of time, a model must be selected based on the strengths and needs of the school (Ross et al., 1997a). Literature suggests that schools begin with a needs assessment targeting improvement goals, so that a careful search for a design or research-based practices can be matched accordingly (Rowan et al., 2004). From there, local school personnel must carefully assess the “fit” or alignment between the model and the local context (Desimone, 2002; Rowan et al., 2004). Matching the design to the school can be especially challenging in high-pressure accountability settings (Desimone, 2002), causing educators to adopt models quickly and without careful consideration of “fit” (Datnow & Stringfield, 2000). In the absence of careful consideration given to school culture, needs, and resources, reform implementation is likely to falter (Datnow & Stringfield, 2000).

***Planning.*** Research suggests that successful whole-school reform implementation results with greater frequency in schools that plan extensively (Rowan et al., 2004). These initial planning activities can be crucial to implementation and should include continuous feedback from stakeholders (Rowan et al., 2004; Rutherford, 2009). Of great importance is establishing timelines, standards, & benchmarks (Desimone, 2002; Rowan et al., 2004; Rutherford, 2009). By establishing benchmarks and standards, school officials are better able to judge the fit of the model selected and make

modifications, monitor outcomes, and mark their own progress throughout the implementation (Desimone, 2002; Rowan et al., 2004).

***Specificity of the design.*** Although whole-school reform designs differ in goals, strategies, and audience, among other things, they also differ in how clearly the process of change is described. For example, some designs are very precise and specific, detailing how teaching and learning should look and specifying the organizational arrangements to be implemented (Rowan et al., 2004). Clear expectations have been shown to positively impact the implementation of reform (Berends et al., 2001). Although literature suggests that models with high levels of specificity are implemented more quickly and with greater fidelity (Rowan et al., 2004), very specific designs may also cause concerns about teacher creativity and professionalism, which may hinder implementation (Desimone, 2002). In fact, studies suggest that models with greater specificity and prescribed instructional materials may generate resentment and resistance from teachers and staff (Vernez et al., 2006).

**District-level factors.** In addition to school-level and design-related factors, research also points to three district-level factors that affect the implementation of whole-school reform: (1) Allocation of resources, (2) Symbolic support, and (3) Stability of leadership.

***Allocation of resources.*** District leadership can facilitate the implementation of whole-school reform by providing a steady stream of resources to support the reform (Datnow, 2000; Rutherford, 2009; Vernez et al., 2006). These resources include funding (Desimone, 2002; Rowan et al., 2004), time and information about the design (Desimone, 2002), and model-related staff development to support the reform (Datnow, 2000; Vernez

et al., 2006). Desimone (2002) suggests that teachers take the allocation of adequate resources as a sign of the district's commitment to the reform process.

***Symbolic support.*** In addition to providing financial support, districts must provide moral support in order to play a more vital role in the change process (Rutherford, 2009). Research suggests a clear relationship between high levels of district support and positive impacts on implementation efforts (Datnow & Stringfield, 2000). Districts can demonstrate their commitment to whole-school reform efforts in many ways. Districts can help with decision-making, budgeting, and the monitoring and refining of implementation (Desimone, 2002). They can also support school-level implementation by moderating the political environment and by simply having leaders openly express support for the reform effort (Rowan et al., 2004). Although district officials must recognize that mandating change does not ensure success, the school district officials have a very powerful ability to help create an environment that will foster the change they wish to see (Rutherford, 2009).

***Stability of leadership.*** Although it is difficult to moderate this factor due to statistically high rates of turnover (Yee & Cuban, 1996), stability of leadership at the district level positively impacts both the implementation and sustainability of reform efforts. Urban districts, in particular, are often subject to changes in the superintendency and board composition about every three years. This leads to instability of the reform environment and a lessened likelihood that the reform will endure (Datnow, 2000). Studies show that levels of implementation of whole-school reform were higher in districts with stable district leadership (Berends et al., 2001).

**External factors.** Finally, studies indicate that in addition to school-level, design-related, and district-level factors, there are three external factors that affect the implementation of whole-school reform: (1) Parent/community involvement, (2) External design teams, and (3) Reform networks.

***Parent/community involvement.*** Research suggests that, in addition to the active engagement of teachers in the decision-making and planning process, the involvement of parents and community members is also important to successful implementation of whole-school reform. Family and community awareness and support of reform efforts increase the motivation of both students and teachers, which may help the period of transition associated with new reform (Desimone, 2002). Although parent and community involvement have been shown to produce positive implementation outcomes (Ross et al., 1997b), many reform efforts neglect to gain their support (McChesney & Hertling, 2000). Desimone (2002) notes that, although literature is lacking on insight into how to gain parent and community involvement, many whole-school reform models involve components to foster greater involvement by all stakeholders.

***External design teams.*** Collaboration with external design teams during the implementation of whole-school reform has been found to produce positive results in the level of implementation (Vernez et al., 2006). Often times, external teams are contracted to assist in order to adopt research-based models that have experienced success in other settings. In some cases, a prescribed curriculum and instructional model is chosen in an effort to speed up results (Datnow, 2000). In addition to the actual model, external design teams can assist schools in many ways, including networking with other schools, providing staff development, training, and by conducting school visits and observations

(Vernez et al., 2006). Adopting externally designed reform models also allows districts to respond to public pressure for change without having to go through the painstaking process of developing a local model so that implementation may proceed more quickly (Datnow, 2000).

***Reform networks.*** Reform networks are ways in which educators involved in the process of reform can learn and share experiences through interpersonal communications. These networks can be used to learn more about research-based practices and ways to implement; more official networks may also provide on-site technical assistance and direct training (Rowan et al., 2004). Many whole-school reform model providers have created networks specific to their model, holding conferences and providing other opportunities for collaboration among educators working in these schools (Desimone, 2002; Rowan et al., 2004).

### **Summary of Whole-School Reform**

The most resonating feature of whole-school reform is the concentration on providing improved student achievement through a coherent alignment of policies and practices related to leadership and governance, curriculum and instruction, professional development, accountability and evaluation, resource allocation, and community engagement (Berends et al., 2002). Funding through competitive grants and focusing on innovation have led to literally thousands of models being implemented in the past decade. Research has focused not only on outcomes and designs, but also on the variables that influence implementation. Although there are existing frameworks of analysis for implementation, a review of research indicates that the major factors

influencing implementation of whole-school reform are: (1) School-level factors, (2) Design-related factors, (3) District-level factors, and (4) External factors.

There is extensive research on the implementation of whole-school reform (Berends et al., 2001; Carlson & Buttram, 2004; Datnow & Stringfield, 2000; Datnow et al., 2003; Desimone, 2002; Rowan et al., 2004; Vernez et al., 2006); however, there is an apparent lack of research on the actual implementation of whole-school, single-sex reform models (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001), which have become increasingly valued since 2006 (Chadwell, 2010). Therefore, it is important to conduct a thorough review of the literature on single-sex education to explore the history, research debate, and sociopolitical context of this burgeoning reform.

### **Overview of Single-Sex Education**

The literature on single-sex education strongly supports the assertion that, while there is a significant body of research on the topic, further research is needed to determine the benefits and/or challenges of implementing single-sex programming in the United States public school systems. Much of the research on the single-gender education is the result of studies conducted in locations with contexts that do not translate well to the American setting. This research is also criticized for having methodological weaknesses and inconclusive findings (Bigler & Signorella, 2011). Although researchers have indicated that single-sex programming may have benefits, particularly for female students, opponents strongly object to the trustworthiness of the current research. Critics suggest that single-sex education is speculatively advantageous, at best, and potentially damaging, at worst. Even in the absence of solid empirical support, single-gender reform continues to spread, particularly with the creation of all-female environments. While

research points to implementation considerations, the current body of knowledge does not include a specific research-based framework for the implementation of whole-school, all-female, single-sex reform.

This review of literature was not written to either support or reject the practice of single-sex education, only to paint a picture of this model of whole-school reform. Regardless of one's position on the issue or opinions of the research, the practice of single-sex instruction is legally permissible and continues to grow. The researcher in this study maintains an unbiased position on the topic and only wishes to demonstrate the need for research related to implementation of all-female single-sex education as a whole-school reform model.

### **Legislation and the Re-Birth of Single-Sex Public Education**

Single-sex public education has a legal history that affects the availability of research in American public settings. The history of legislative changes related to single-sex education also adds to the controversial nature of this model of reform.

There have been, and continue to be, many reform models or programs that enter public schools: whole language, differentiated instruction, project-based learning, and Montessori, to name a few. There are proponents and skeptics of each, as there are with single-gender programs. The difference is that for a public school to create a single-gender program, federal regulations had to be written.

(Chadwell, 2010, p. 37)

The adoption of the No Child Left Behind Act in 2001 signaled the legislative re-birth of single-sex education in the United States, a practice that was banned for nearly thirty years. Subchapter V of NCLB, entitled "Promoting Informed Parental Choice and



Innovative Programs,” included a provision that allowed federal funds to be made available to local public schools districts for the purpose of implementing and sustaining innovative educational programs, including the creation of single-sex classes and schools (McDowell, 2006). The Secretary of Education released initial guidelines on Title IX requirements in relationship to single-sex schools and classes on May 8, 2002 (Federal Register, 2007). Although the door was opened for the creation of single-sex environments, federal funding was not immediately available because the proposal was a direct violation of the anti-discrimination stipulations put forth in Title IX of the Education Amendments of 1972. In order to release funds for the purpose of supporting single-sex classes and schools, Title IX would need to be amended. On October 25, 2006, the U.S. Department of Education published final regulations, which amended Title IX and partially deregulated previous restrictions and allowed funding for innovative educational programming, including single-sex schools and single-sex programs within existing coeducational schools (Bigler & Signorella, 2011; Federal Register, 2007). Among proponents to the changes to Title IX that allowed for single-sex education were Senator Hillary Rodham Clinton from New York, Senator Kay Bailey Hutchison from Texas, and Senator Dianne Feinstein from California. Both Senators Clinton and Feinstein were the products of single-sex schools (Meyer, 2008).

### **The Research and Controversy Surrounding Single-Sex Education**

As the traditional, co-educational public school setting has been criticized for failing to address the educational, developmental, and social needs of disadvantaged youths, public schools systems have started looking to single-sex schools and classes as a potential strategy to increase academic achievement with inner-city, at-risk students

(Salamone, 2003). Although there is extensive research available on the topic of single-sex instruction, there are numerous concerns that should be noted before attempting to synthesize the multitude of findings. The primary characteristic that limits single-sex research is context. A number of studies have been conducted in different countries, societies, and in private, often religiously affiliated institutions (Bigler & Signorella, 2011; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001; Salamone, 2003). The variability of contexts in these studies is seen as problematic because the educational traditions, cultural contexts, socialization patterns, even religious influences make it difficult, if not impossible, to generalize the results of these studies to the current initiatives in the U.S. (Mael, 1998; Salamone, 2003). Other research concerns include selection bias (Education Week, 2012, January 18; Hayes, Pahlke, & Bigler, 2010; Salamone, 2003), multiple interrelated variables at play (Chadwell, 2010; Patterson & Pahlke, 2010), inconclusive findings (Mael, 1998; Rogers, 2008b; Warrington & Younger, 2003), and an overall lack of reliable research on public, single-sex education in the United States (Education Week, 2012, January 18; Mael et al., 2005; Thiers, 2006; USDOE, 2005). Bigler and Signorella (2011) suggest that methodological concerns in the studies used to support the merits of single-sex education prevent the findings from meeting the standards of social science research. Other concerns include comparisons to coeducational settings that are not helpful, a short track record of studies that produce findings from the United States (Chadwell, 2010), and prevalence of one-time studies over longitudinal studies and the data they provide (Rogers, 2008b).

As a result of the multiple concerns with the research being used to both support and condemn single-sex instruction, it is important for educators, policymakers, parents,

and community members to take a guarded approach when considering single-sex instruction (Hoffman, Badgett, & Parker, 2008), keeping in mind that there is insufficient evidence either to fully support or to wholeheartedly reject single-sex instruction (Warrington & Younger, 2003). Salamone (2003) cautions educators to remember that inconclusive findings are not necessarily negative findings.

**Support for single-sex education.** While it is noted that gender inequities occur in many co-educational settings (Mael, 1998), proponents of single-sex education believe that gender differences should be embraced in the classroom and used as a way to open more opportunities for student learning (Chadwell, 2010). Advocates of single-sex instruction argue that single-gendered environments decrease distractions and improve student achievement while fostering positive socio-emotional development and greater academic aspirations for students (USDOE, 2008). They also suggest that single-sex environments make it socially acceptable to be more interested in academics (USDOE, 2005). Single-gender schools and classrooms are also credited with having a positive effect on discipline, development of student self-esteem, dropout rates, student participation in class, students electing to take more academically rigorous courses, and perceptions of gender stereotypes (Chadwell, 2010).

Although there are concerns about the trustworthiness of research regarding single-sex instruction (which will be addressed later in this review), there are a greater number of studies that show positive results in single-gender settings; there are also numerous studies that show no difference between single-sex [SS] and coeducational [CE] settings (Chadwell, 2010). Findings show slightly positive effects of single-gender settings as compared to co-educational settings in regards to certain academic measures,

such as student achievement test scores, persistence through high school graduation, and interest in taking more challenging courses (Thiers, 2006, April).

In 2005, the U.S. Department of Education conducted a systematic review of the 40 best quantitative studies on single-sex education and the findings lend some empirical support to the hypothesis that SS benefits academic achievement and socio-emotional development (USDOE, 2008). In this review, researchers looked at a pool of 2,221 SS studies and through criteria, such as transferability to the American context and methodological considerations, narrowed the selection down to 40 quantitative and 26 qualitative studies. Of the 26 qualitative studies, only four met the criteria for inclusion and were reviewed separately (USDOE, 2005). The results of this review yielded 112 findings from the 40 studies that translated into 32 outcome categories, summarized below (Table 1). Pro-SS findings favored single-sex environments. Pro-CE findings favored co-educational environments. Null findings indicate that there is no advantage for either SS or CE environments. Mixed findings indicate that there were significant findings in opposite directions for different subgroups on the same variable (e.g., positive effect for girls, negative for boys, etc.).

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### Summary of Systematic Literature Review Findings

Outcome Measure Category and Topic	Total Outcomes	Percentage of Outcomes			
		Pro-SS	Pro-CE	Null	Mixed
Concurrent Academic Accomplishment	43	35%	2%	53%	10%
Long-Term Academic Accomplishment	4	25%	0%	75%	0%
Concurrent Adaptation and Socio-Emotional Development	49	45%	10%	39%	6%
Long-Term Adaptation and Socio-Emotional Development	10	50%	20%	30%	0%
Perceived School Culture	4	50%	0%	50%	0%
Subjective Satisfaction	2	50%	50%	0%	0%
<b>Total</b>	<b>112</b>				

Note. SS = single-sex. CE = coed.

*Exhibit reads: A total of 43 outcomes were reported across all studies in the area of concurrent academic accomplishment, and 35 percent of those outcomes were pro-single-sex education, 2 percent were pro-coeducation, 53 percent were null (indicating no differences between single-sex and coed schools), and 10 percent were mixed (supporting single-sex schools or coed schools for some but not all subgroups).*

*Source: <http://www.ed.gov/rschstat/eval/other/single-sex/index.html> (2005).*

**Table 1: Summary of Systematic Literature Review Findings (USDOE, 2005)**

More studies reported positive effects of single-sex settings over co-educational settings in every outcome measure, except for subjective satisfaction, which was tied. In terms of positive effects on all-subject academic achievement, roughly one third of all case studies reported findings favoring single-sex schools, with the remainder split between null and mixed. Only one study favored CE settings and the advantage listed was only for white females, not Asian or Black females (USDOE, 2005). The executive summary released by the Department of Education (2005) states:

It is more common to come across studies that report no differences between SS and CE schooling than to find outcomes with support for the superiority of co-education. In terms of outcomes that may be of most interest to the primary stakeholders (students and their parents), such as academic achievement test scores, self-concept, and long-term indicators of success, there is a degree of support for SS schooling. (p. xvii)

While this report was seen as evidence of support for single-sex education, researchers were quick to point out the methodological flaws of the review, including the fact that none of the research reviewed in the report was considered to have met the standards necessary to do a meta-analysis (Mael et al., 2005). The Department of Education later remarked that the review did not include any studies from public, single-sex school in the United States, thus findings should not be generalized (USDOE, 2008). Regardless of concerns about the trustworthiness of the review completed by the U. S. Department of Education, there are other studies that report benefits for students in single-sex settings. Studies suggest that there are benefits related to academic achievement, socio-emotional development, and those specific to disadvantaged and minority populations.

Academic benefits of SS include higher levels of academic engagement (USDOE, 2008), more active learning in both math and science (Rogers, 2008a), and positive feelings about challenging courses (Stowe, 1991). Students in SS environments exhibited an increased likelihood of completing homework and more positive academic and behavioral interactions with teachers. Students in a 2006 study by Frances Spielhagen reported that they were able to focus better in SS classes (Spielhagen, 2006, April). Studies also support the position that single-sex schooling results in higher academic

aspirations, evidenced by students' increased interest in more academically rigorous courses. This could also be associated with a number of post-high school, long-term positive outcomes suggested by the 2005 USDOE review, including persistence through high school graduation, postsecondary enrollment, and participation in collegiate activities while maintaining full-time enrollment for a four-year period (USDOE, 2005).

Evidence from surveys and site visits indicate that single-gender schools may benefit students, male and female, by fostering socio-emotional health and providing positive peer interactions (USDOE, 2008). Case study findings demonstrate that SS students are inclined to demonstrate cooperative leadership and high levels of group cohesiveness (Rogers, 2008b). Observations also showed more positive results for respective grade level comparison with regard to positive student interactions and behavior (USDOE, 2008). This bolsters findings from the 2005 review that reported positive effects of SS schools on development of self-concept and self-control (USDOE, 2005).

In addition to widespread benefits for all students, advocates of single-sex schools point to the practice for the benefits afforded to economically disadvantaged and minority students (Patterson & Pahlke, 2010; Riordan, 1998). There is even preliminary evidence to suggest that single-gendered instruction is an option that may reduce the overrepresentation of minority males in special education (Piechura-Couture, Heins, & Tichenor, 2009). Hubbard and Datnow (2005) suggest that the positive experiences of low-income and minority students are the product of the single-sex setting and the presence of caring proactive teachers. Riordan (1998) argues that there are many elements of single-sex instruction that lead to the success of all students, including those

from disadvantaged backgrounds; among them are: (1) the diminished strength of negative youth values, (2) a greater degree of order and control, (3) the presence of successful role models, (4) a reduction in the gender differences in curriculum, (5) a reduction in gender bias in teacher-student interactions, (6) a reduction in gender stereotypes in peer interaction, (7) greater leadership opportunities, (8) pro-academic parent/student choice, (9) smaller school size, (10) core curriculum emphasizing academic subjects, (11) positive relationships among teachers, parents and students, (12) a shared value community with an emphasis on academics and equity, and (13) active and constructivist teaching and learning.

There is still much to be learned about the functions and variables that lead to student success in single-sex instructional environments, but research suggests that benefits do exist. Single-sex advocate Rosemary Salamone (2003) states:

For at least some students, and for reasons we are just beginning to comprehend, it has become increasingly clear that the most effective way to reach that end [student success] is to offer an emotional and developmental ‘safe haven’ apart from the other sex for at least a portion of their education, whether in particular classes, or grades, across the curriculum, or in completely different schools. (p. 243)

**Opposition to single-sex education.** Opponents of single-sex education fear that changes to Title IX regulations allow single-sex programming to be implemented without adequate safeguards against stereotyping and other forms of gender discrimination (National Coalition for Women and Girls in Education [NCWGE], 2008). By separating students by gender, critics believe the only outcome is increased gender stereotyping



(Patterson, 2012, February); a concern that even single-sex supporters agree is very real (Chadwell, 2010). The concern is that single-gender settings reinforce the view that males and females differ biologically in their cognitive abilities, suggesting to girls that they are somehow deficient (Salamone, 2003). There is also the concern that single-gender environments condone and promote stereotypical attitudes towards the opposite sex (Datnow, Hubbard, Conchas, 2001). There are studies to suggest that there is merit to these concerns, indicating that all-female environments are particularly susceptible to inadvertently promoting gender inequality (Salamone, 2003). Similarly, Patterson and Pahlke (2010) found that even with high levels of student connection to the single-sex school, gender-stereotyping issues were still a factor.

Since the authorization of single-gender public education in 2006, the American Civil Liberties Union [ACLU] and the National Organization of Women [NOW] have actively monitored single-sex programs and have worked to reverse a practice they believe to be outdated and based on discredited science (Chadwell, 2010; Education Week, 2012, June 5). Proponents of single-sex education have commended the ACLU and NOW for creating awareness of the importance of avoiding gender stereotypes in SS settings; however, they have also called on the organizations to support balanced research to examine issues of stereotyping within CE and SS classes (Chadwell, 2010). Thus far, the organizations have not answered this call and in June of 2012, the ACLU announced that it was seeking to stop several states from separating students by gender. The organization began sending cease and desist letters to school districts whose programs they felt were in violation of federal law (Education Week, 2012, June 5). The NASSPE (2012) responded by removing active lists of SS schools from their website.

Opponents to single-sex reform also note concerns about the lack of sound, definitive research to guide educators and policymakers. Bracey (2006) states that whereas “NCLB calls for schools to adopt curricula and programs that are supported by scientifically-based research...it is hard to see how [single-sex] schools can be justified by the weak and contradictory research evidence” (p. 55). Although it did not come out solidly in opposition of single-sex education, in 1998, the American Association of University Women [AAUW] convened a roundtable of educational scholars to examine and discuss the available research on single-sex education. The AAUW published the following points of consensus regarding the research on single-sex instruction:

- There is no evidence that single-sex education in general ‘works’ or is ‘better’ than coeducation. The ‘success’ or ‘failure’ of any K-12 single-sex education initiative is relative to a particular group of students in a particular setting and a given set of academic or social objectives;
- No matter whether in a coed or a single-sex setting, educators and policymakers need to work further to identify the components of ‘good education’. It is a mistake to view gender as ‘the key variable’ that determined a school’s effectiveness;
- Single-sex educational programs produce positive results for some students in some settings. However, researchers do not know for certain whether the benefits derive from factors unique to single-sex programs, or whether these factors also exist or can be reproduced in coeducational settings;
- The long-term impact of single-sex education on girls or boys is unknown;

- No learning environment, single-sex or coed, provides a sure escape from sexism. Single-sex classes can reinforce stereotypes about men's and women's roles in society just as coeducational programs can; and
- Single-sex education covers so broad a gamut as to defy *most* generalizations. Evaluating the single-sex component of these programs requires considering the different cultural, social, and institutional factors that can influence outcomes in each case (AAUW, 1998, p. 3).

While critics often point to weaknesses in single-sex research supporting SS, there are also studies that report negative findings on single-sex settings. These findings suggest issues with classroom enjoyment, student behavior, and limited extra-curricular opportunities in single-sex settings. For instance, a 1991 study indicated that although there were positive academic effects, students enrolled in a single-sex physics class at a co-educational campus reported enjoying class less (Stowe, 1991). Middle school teachers on a single-sex campus reported inadequate instructional support and an increase in student misbehavior (USDOE, 2008). Concerns have also been raised that extracurricular offerings were found to be limited in single-gender schools at the elementary and middle school levels, although students in the study stated that they believed they had ample opportunities to engage in activities and pursue leadership roles (USDOE, 2008).

Perhaps most concerning are studies that suggest the possibility of negative effects of single-sex settings on female body image and the development of eating disorders. A study reviewed in the 2005 analysis by the U.S. Department of Education found negative effects of single-gender environments on female eating disorders

(USDOE, 2005). Bigler and Signorella (2011) also point to a study in which SS female students endorsed a thinner ideal body image than their CE peers, suggesting the need for research on the effect of single-sex settings on female psychological and emotional development.

**Inconclusive findings.** There are some research findings on single-sex education that are considered inconclusive due to either the context of the study, or results that simultaneously report benefits and disadvantages of single-sex instruction. A primary example of inconclusive findings involves California's implementation of single-gender academies in the 1990s, which is considered by some to be an account of the difficulties to avoid in SS education and an example of some single-gendered practices at their worst (Salamone, 2003). By most accounts, the results of this initiative were disappointing and the corresponding research amplified major concerns with single-gendered environments. Researchers, on the other hand, consider research findings from this initiative to be misleading due to the poor implementation of SS academies (Salamone, 2003).

California's single-sex initiative experienced problems from the very beginning. The implementation of single-sex academies was introduced as a means of school choice, not as school reform to address gender inequities (Datnow, Hubbard, & Conchas, 2001). The decision to take a gender-blind approach without an articulated commitment to gender equity is at odds with the purpose and spirit of single-sex education (Salamone, 2003). In addition to serving as a means to improve standardized test scores, students who attended the academies were recruited because of discipline problems, low-achievement, or economic disadvantages (Datnow, Hubbard, & Conchas, 2001; Salamone, 2003). As a result, the system in California became a new form of tracking

and segregation for the most troubled students, who were often encouraged to apply, rather than self-selecting into the program (Datnow, Hubbard, & Conchas, 2001). Other issues plaguing the initiative included a lack of funds for staff development and monitoring (Salamone, 2003), politics around the legislation, inadequate resources, and a general lack of support for gender-based reform (Datnow, Hubbard, & Conchas, 2001).

Ultimately, the single-sex academies in California were a failed effort. Although there was much to be learned from this politically misguided, unfocused effort, scholars recommend the use of caution when considering the initiative in California as a means to draw conclusions on the merits of single-sex education (Salamone, 2003).

In fact, it can be difficult to draw definitive conclusions on the benefits of single-gendered educational environments due to the multitude of studies with mixed findings (USDOE, 2008). Numerous studies support single-sex education as having benefits for females, but not males (Bradley, 2009; Salamone, 2003; USDOE 2008). These studies suggest that girls benefit more than boys in terms of socio-emotional outcomes (USDOE, 2008), academic improvements in math and reading (Bradley, 2009), and from better peer interactions (USDOE, 2008). More recent research rejects earlier findings related to males, pointing to potential benefits gained by certain populations of male students, mainly minority and disadvantaged (Salamone, 2003).

There are also research findings that lead some educators to believe that single-sex instruction may be beneficial for some students, yet may have no effect, or even be harmful, for others (Patterson & Pahlke, 2010). The reports of several studies seem to reverse and contradict previous research about whom, if anyone, benefits from single-

gendered education (Glasser, 2012; Rogers, 2008a; Salamone, 2003; USDOE, 2005; USDOE, 2008), leading to frustration and growing lack of consensus.

***Inconclusive findings particular to all-male settings.*** Research regarding the effectiveness of all-male settings has also yielded mixed results. As public schools engage in a constant and deliberate search for ways to address the disturbing achievement gaps between minority males and other students, interest has piqued at the suggestion that same-sex schools may yield more favorable results than traditional co-educational settings (Patterson, 2012, February; Salamone, 2003). Research suggests that boys have educational and developmental vulnerabilities that make them statistically more likely to be involved in violent crimes, to receive failing grades and discipline referrals, and to be sentenced to prison (Chadwell, 2010). Advocates of all-male schools suggest that these vulnerabilities can be appropriately addressed by the positive influence of SS environments and their ability to offer an academically-focused school culture and stricter discipline for boys (Patterson & Pahlke, 2010).

Although limited in number, there are studies that support potential benefits of all-male environments. In particular, several studies (Ascher, 1992; Hales, 1998; Hudley, 1995; Riordan, 1994) suggest that males from low-income and minority backgrounds benefit from single-sex schools (as cited in Datnow, Hubbard, & Conchas, 2001). A study by Piechura-Couture, Heins, & Tichenor (2009) found that all-male, single-gender classrooms that allow for greater physical movement, elevated noise levels, and higher levels of direct teacher interaction yielded positive effects on male students. Other research (Hawley, 1993; Reisman, 1991) highlights the benefits of all-male environments, such as promoting male bonding and optimizing character development

(as cited in Datnow, Hubbard, & Conchas, 2001). In terms of behavioral issues, one study reports that boys enrolled in an all-male environment received fewer discipline referrals as compared to their CE peers (Rogers, 2008b).

Studies also suggest that at-risk and minority males benefit from the single-sex environment because it promotes self-confidence and a belief that they are “masters of their own destiny” (Salamone, 2003). The U.S. Department of Education also found that disadvantaged male students profit from an environment that allows them to pursue academic interests without criticism from peers (USDOE, 2005).

Conversely, there is also evidence suggesting the potentially negative behavioral effects associated with all-male educational settings. Boys in SS settings showed instances of increased aggressiveness, resistance to learning and task expectations, boisterous behavior, and competition with the teacher for class leadership (Rogers, 2008b). There are also indications that all-male environments contribute to increased bullying (Rogers, 2008b; Spielhagen, 2006, April) and a decline in academic achievement (Rogers, 2008b). Finally, these studies suggest that boys are generally less happy with single-sex classes than girls and prefer co-educational settings (Rogers, 2008b; Spielhagen, 2006, April).

Still, advocates of all-male settings promote single-sex education as a way to enhance the academic achievement and overall adjustment and well-being of male students (Thiers, 2006, April). Educators in all-male settings feel that the separation is more supportive for the needs of young men, especially in their ability to accommodate for the shorter attention span, slower maturational rate, and higher energy levels of young males (Salamone, 2003). These classes are also seen as a protective environment that

allows boys to be themselves and to not feel academically inferior to girls (Chadwell, 2010) while offering a broader range of academic options, including those traditionally considered feminine, such as foreign language and the arts (Salamone, 2003).

Unfortunately, the true merits of all-male educational settings are largely unknown and suspect because, to date, most studies have focused on all-female settings and the findings of studies on boys' schools have been largely anecdotal and imprecise (Salamone, 2003). Advocates argue that all-male environments should be given a chance to succeed while research is conducted to determine the appropriate types and levels of support, rather than eliminated because of isolated findings of misbehavior and aggression (Rogers, 2008b).

### **Research on All-Female Settings**

In contrast to the inconclusive findings on all-male environments, research on all-female, single-sex education has yielded more positive and less ambiguous results (Hoffman, Badgett, & Parker, 2008; Mael, 1998; Riordan, 1998; Rogers, 2008b; Salamone, 2003; Spielhagen, 2006, April; USDOE, 2005; USDOE, 2008). Some studies report that there is much to be gained by placing young women in learning environments created to address the socio-emotional and developmental needs of girls. Statistically speaking, girls are more likely to suffer from depression, be involved in an abusive relationship, have body and self-esteem issues, and attempt suicide (Chadwell, 2010). They are also less likely to receive attention from teachers in the classroom (Chadwell, 2010; Salamone, 2003). The argument for all-female settings primarily points to the importance of creating a healthy, accepting, academically focused learning environment concentrated on enhancing girls' self-esteem, developing interest and competency in



math and science, providing leadership opportunities, and opening access to non-traditional career paths (Rogers, 2008a; Salamone, 2003).

Research continues to report good news on single-sex settings for girls (Rogers, 2008b). Overwhelmingly positive responses from female students suggest that SS may be particularly beneficial for middle school girls (Spielhagen, 2006, April). The effect on the achievement of African American and Hispanic females in a single-sex setting has been positive (Riordan, 1998), but data from a study by Patterson and Pahlke in 2010 indicated that African American and Latina students earned lower grades than White and Asian students, a result that held even after accounting for family income status and prior academic achievement (Patterson & Pahlke, 2010). This same study indicated that African American females felt less connected to the single-sex school than their peers, but researchers add that may have resulted from their minority status in the school context and within the broader society (Patterson & Pahlke, 2010). It is interesting to note that this finding did not hold true for Latina students.

Certainly, prior achievement is a significant predictor of academic achievement and persistence in all-female settings (Patterson & Pahlke, 2010), but several studies point to the importance of students self-selecting into or having a preference for all-female environments as an indicator for success (Education Week, 2012, January 18; Patterson & Pahlke, 2010; Rogers 2008a). A recent study from Northwestern University analyzed data on over 200,000 single-sex students from 123 schools in Trinidad and found that while single-sex settings were not inherently beneficial for boys and some girls, single-sex schools appeared to benefit female students who prefer a single-sex environment (Education Week, 2012, January 18). This echoes results from the Patterson

& Pahlke (2010) study that indicated success in an all-female setting was more likely for girls who had a stronger in-group preference or bias. A 2008 case study in which students were separated for math and science classes found that, while boys preferred the CE setting, girls tended to prefer single-sex classes (Rogers, 2008a). Their preference was so strong that, at conclusion of the study, all of the girls in the single-sex class signed a petition to continue as a single-sex class.

All-female environments are credited as a way to address gender inequity by creating an environment in which girls feel more comfortable participating in class, thereby increasing their enjoyment of learning. Research suggests that girls respond more willingly and with greater frequency in SS classes than in CE classes (Rogers, 2008b; Stowe, 1991). In addition to an increased focus on academics and task orientation, the active learning environment created in all-female settings has also been shown to improve classroom discipline, resulting in fewer disciplinary referrals for girls (Rogers, 2008b).

Research and literature suggest that the learning environment created by all-female settings is empowering for young women, providing interpersonal support and leadership opportunities that are advantageous for girls (Hoffman, Badgett, & Parker, 2008; Salamone, 2003). Teachers believe that girls benefit from better peer interactions, a greater sense of order and control, and the feeling of safety provided by the all-female setting (USDOE, 2008). Other environmental advantages of SS for girls include an increased concentration on academic work (Salamone, 2003; USDOE, 2008), the chance to work cooperatively (Rogers, 2008b), the ability to freely speak their opinions

(Chadwell, 2010; Rogers, 2008b), and relief from the pressures related to their appearance (Chadwell, 2010; Salamone, 2003).

Single-sex settings have proven to be particularly advantageous for girls in relationship to academic achievement, but they also appear to spawn greater interest in certain subjects, such as math and science.

...The reported outcomes from a small but growing number of existing programs, however inconclusive, continue to expand the discussion of single-sex education beyond achievement gains. Educators in these programs, both public and private, consistently report that girls in particular prefer single-sex math and science classes and that they demonstrate greater confidence and willingness to take risks when they later return to mixed classes in these subjects. (Salamone, 2003, p. 227)

Girls experience more opportunities to participate and explore interests beyond the curriculum in SS math and science classes (Rogers, 2008a; Spielhagen, 2006) and experience more positive attitudes towards the subject matter (Salamone, 2003), even expressing greater interest in related careers (Stowe, 1991). Research suggests that not only are girls from single-sex settings more likely to pursue non-stereotypical courses and majors, such as physics and engineering, single-sex environments may also encourage girls to pursue higher educational and career aspirations, seek out positions of leadership and authority, and become active in politics (USDOE, 2008).

Overall, the research on all-female, single-sex settings suggests that there are benefits in terms of self-esteem, leadership, and engagement in math and science (Datnow, Hubbard, & Conchas, 2001). As there are now many public, all-female schools

that have experienced successful student outcomes, much of the success of girls' schools is attributed to the environmental factors that encourage effective teaching and learning while fostering the healthy emotional development for young women, in addition to providing opportunities for female empowerment with a conscious concern for equity (Salamone, 2003).

### **Research on Implementation of Single-Sex School Reform**

Although the researcher is not aware of a comprehensive framework to guide the implementation of single-sex reform, a review of relevant research does lend findings to suggest the important areas of consideration. The areas for consideration include: (1) Pre-implementation planning, (2) Focus on gender-based reform, (3) Teacher buy-in, (4) Relevant professional development, (5) Student self-selection, and (6) District and campus administrative leadership.

**Pre-implementation planning.** Like any restructuring endeavor, the success of implementation of single-gender reform relies heavily on pre-implementation planning (Protheroe, 2009). Coordinator for single-gender initiatives in South Carolina, David Chadwell (2010), states:

Single-gender education means more than simply putting boys and girls in different classrooms; a successful single-gender program, as with any school initiative, involves many constituencies or stakeholders, correlates with the mission of the school, meets the needs of both boys and girls, and expands their opportunities. Implementing single-gender education requires more than a couple of recommendations. It requires a plan of action. (p. 56)

Unfortunately, history has shown us that single-sex programs are sometimes introduced without adequate preparation, leaving schools unprepared to take the steps necessary to provide truly effective single-sex education (Hanover Research, 2012). In some examples, principals begin single-gender programs as an experiment without the knowledge or approval of the district (Chadwell, 2010). There are also cases where schools implement single-sex classes in an unplanned, ad hoc fashion, for short periods of time and without sufficient planning or evaluation (Warrington & Younger, 2003).

Pre-implementation planning of single-sex programming may help administrators anticipate roadblocks and develop strategies to help bolster success. Single-gender programs, in particular, tend to experience high levels of suspicion (Chadwell, 2010). Thus, it is necessary to establish a communication strategy that ensures open and honest lines of communication with stakeholders from the beginning (Chadwell, 2010; Salamone, 2003). Schools must be able to explain to the community the reasons for creating single-gendered environments, the benefits they expect to realize, and be able to answer hard questions, such as how the school will navigate the tricky divide between gender stereotyping and gender equity (Chadwell, 2010; Salamone, 2003). Pre-implementation planning and assessment is also a way to ensure that the single-gender program they plan to construct fits the local constraints and needs (Datnow, Hubbard, & Conchas, 2001).

**Focus on gender-based reform.** In addition to extensive planning, research clearly points to the importance of implementing single-sex programs with the explicit goal of achieving gender equity (Datnow, Hubbard, & Conchas, 2001; Herr & Arms,

2004; NASSPE, 2012). Unfortunately, the goal of single-sex reform is often to cure a myriad of concerns not associated with gender equity.

One of the mandates regarding the implementation of single-sex public education is that before implementation can occur, a statement regarding the condition that single-sex implementation is intended to remedy must be in place. The irony is that many districts are implementing single-sex education while listing a wide range of conditions ([such as] low test scores...)...that are to be remedied, yet without research-based evidence. (Bradley, 2009, p. 15)

Single-sex programs need a clearly identifiable purpose (Salamone, 2003), but too often the focus on raising test scores diverts attention away from the implementation reform focused on achieving gender equity (Herr & Arms, 2004). Researchers feel that the eventual closure of most of the California academies implemented in the 1990s reinforces the idea that gender-based reform must be a priority in order for single-sex education to be successful (Datnow, Hubbard, & Conchas, 2001).

Founder of the NASSPE, Leonard Sax, cautions that, “Simply separating the sexes does not cause academic benefits” (Education Week, 2012, January 18). Single-sex educators do not suggest that boys and girls receive different content, concepts, or skills (Chadwell, 2010), but that classes are designed to address students’ gender-based developmental needs (Spielhagen, 2006, April). Sax adds that many districts “plunge into experimentation...without a thorough grounding in the complexities of gender differences in how girls and boys learn” (NASSPE, 2012, para. 1).

A 2001 study reported that, overall, there tended to be a lack of deep inquiry about gender equity and a dearth of opportunities for educators to discuss what it meant

to be teaching in a single-gender classroom (Datnow, Hubbard, & Conchas, 2001). The U.S. Department of Education also found “little evidence of substantive modifications to curricula to address the specific needs of boys or girls” (USDOE, 2008). Although the focus on accountability often takes center stage (Herr & Arms, 2004), advocates of single-sex instruction agree that a clear focus on gender equity is a necessary component of effective single-sex programming (Datnow, Hubbard, & Conchas, 2001; Herr & Arms, 2004; NASSPE, 2012).

**Teacher buy-in.** Achieving teacher “buy-in” must be a primary consideration when implementing single-sex reform.

Teachers are the ones who breathe life into the program. Their commitment to the program and confidence in delivering it will make or break the program.

(Chadwell, 2010, p. 87)

Successful school-wide implementation is more likely when the staff is fully committed to the reform (Warrington & Younger, 2003). Student achievement may also be enhanced by being placed with an effective teacher who believes strongly in the effectiveness of single-sex instruction (Hoffman, Badgett, & Parker, 2008). In addition to having a strong conviction for the merits of SS, teacher buy-in is also achieved through having input on their placement and feeling equipped with the necessary skills and training to meet the needs of the single-sex classroom (Chadwell, 2010). Unfortunately, in instances of poor planning of reform, which are unlikely to succeed, teachers are thrown into a single-sex environment, forced to react to a new setting and work proactively to acquire the knowledge, skills, and attitudes needed to teach effectively in a single-gender classroom (Rogers, 2008b).

**Relevant professional development.** Research on professional development consistently shows that when teachers feel well-trained in the reform they are attempting to implement, they implement it more consistently and with greater success (Rogers, 2008b). In single-sex education, educators' ideologies about gender greatly impact implementation (Datnow, Hubbard, & Conchas, 2001), suggesting that professional development for teachers prior to implementation is critical to the success of single-gender education (Chadwell, 2010). Unfortunately, studies also suggest that schools across the country are implementing single-sex programs without appropriate professional development to support teacher readiness for implementation (Bradley, 2006, Datnow, Hubbard & Conchas, 2001; Rogers, 2008b; USDOE, 2008). The U.S. Department of Education reports that fewer than half of the single-sex teachers who participated in the 2008 survey received any professional development on single-sex education to support teacher readiness for implementation (USDOE, 2008).

**Voluntary student enrollment.** Several studies link the success of single-sex environments to the importance of having students voluntarily, and not mandatorily, placed in single-gender settings (Hoffman, Badgett, & Parker, 2008; Rogers, 2008b; Spielhagen, 2006, April). A 2008 literature review on single-sex education noted that the studies yielding the most positive affective outcomes from students occurred in settings where students opted to participate (Rogers, 2008b). Students who voluntarily participated in single-sex settings reported enjoying their experience (Spielhagen, 2006, April), while students mandated to participate in single-gender environments clearly denounced this practice (Hoffman, Badgett, & Parker, 2008).



**District and campus administrative leadership.** Administrative leadership at the campus and district levels has much to do with both the success and lack of success in the implementation of single-sex reform (Rogers, 2008b). At the district level, it is important for administration to be active in the planning process and to actively assist with the coordination efforts (Chadwell, 2010). At the campus level, research suggests that school administrators in successful settings work to support the curriculum, assist with program materials and resources, secure funds for professional development, and help to promote a learning environment that embraces both an academic and interpersonal focus (Chadwell, 2010; Hubbard & Datnow, 2005).

### **Rationale for Research on the Implementation of Whole-School, All-Female, Single-Sex Education**

Single-gender schools and programs are now a nationwide phenomenon, occurring in public schools all over the country (Chadwell, 2010). According to data published by the National Association for Single-Sex Public Education (2012), the number of public schools offering single-sex educational opportunities was roughly a dozen schools in 2002 and has risen to at least 506 public schools in 2011. Of those schools, the association reports that 116 of the 506 schools qualify as single-sex campuses, meaning that student enrollment is limited by gender (NASSPE, 2012). The 2011 data reports that among single-sex campuses, 67 were all-female, 44 were all-male, and 5 were dual academies. It is important to note that the U.S. Department of Education does not keep an official tally of single-gender schools (Education Week, 2012, January 18) and federal regulations do not require single-gender schools to report data (Chadwell, 2010), so statistics regarding single-sex education may be inexact.

Data regarding the number of public single-gender campuses may be questionable, but it is clear that single-sex reform is spreading, even in the absence of solid empirical support (Chadwell, 2010). While many researchers have focused on examining whole-school reform implementation and outcomes (Peurach, 2012, February 28), there is a need for additional research specific to the implementation of whole-school, single-sex reform (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). As all-female environments are emerging in greater numbers (Chadwell, 2010; NASSPE, 2012), it is essential to examine how whole-school, all-female reforms are implemented in the public sector, particularly in the current sociopolitical context characterized by increased pressures from state accountability and a reductions in funding for schools (Datnow, Hubbard, & Conchas, 2001).

### **Summary of Single-Sex Education**

Without a doubt, there is a great deal of controversy in the highly polarized research field of single-sex education. There appears to be evidence that single-sex programming may have benefits, particularly for female students; however, research with positive conclusions has been met with strong opposition. Questions regarding the trustworthiness, and therefore merit, of findings in this field serve to fuel the debate. Critics suggest that minor advantages found by often questionable studies are far outweighed by even the suggestion that single-sex education may be harmful to students. And, yet, single-gender reform continues to spread, particularly with the creation of all-female environments. While research points to implementation considerations, and there are frameworks for analyzing the implementation of other whole-school models, the

current body of knowledge does not include a research-based framework for the implementation of whole-school, all-female, single-sex reform.

### **Summary**

This chapter provides an overview of whole-school reform, including the history, federal legislation and funding, and current status of the reform. This chapter also provides an overview of public, single-sex education in the United States, detailing the history of legislation, research findings, and rationale for the proposed study.

Chapter Three provides an overview of the research design, the procedures for data collection, the process for data analysis, and the strategies to ensure the trustworthiness of the study.

## **CHAPTER THREE**

### **METHODOLOGY AND PROCEDURES**

The purpose of this chapter is to outline the methodology and procedures for the study. Included are the purpose of the study, research questions, and a rationale for the selected methodology, framework, and design. This chapter also outlines the sources of data, description of the sample, procedures for data collection, methods for data analysis, and strategies to ensure trustworthiness of the study.

#### **Purpose of the Study**

Research regarding the successful implementation of all-female, single-sex education as a whole-school reform model is limited (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). Therefore, the purpose of this study was to explore the implementation experiences of stakeholders from a public, all-female, single-sex campus that experienced successful student outcomes, as evidenced by receiving the highest rating from the state accountability system in 2010-2011. This research examined the participants' views of the factors that influence successful implementation of this model.

#### **Research Questions**

The following research questions were addressed in this study:

1. What are stakeholder perceptions of the factors that influenced the successful implementation of an all-female, single-sex, whole-school reform?
2. What are stakeholder perceptions of the successes experienced during the successful implementation of an all-female, single-sex, whole-school reform?

3. What are the stakeholder perceptions of the challenges to the successful implementation of an all-female, single-sex, whole-school reform?

## **Research Methods**

### **Qualitative Research Methodology**

Qualitative research is concerned with studying things in their natural setting, attempting to achieve an understanding of a phenomenon or event by studying the meaning people have constructed through their experiences (Merriam, 2009). Patton (1985) describes qualitative research as:

...An effort to understand situations in their uniqueness as part of a particular context and the interactions there. This understanding is an end in itself, so that it is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting – what it means for participants to be in that setting, what their lives are like, what’s going on for them, what their meanings are, what the world looks like in that particular setting – and in the analysis to be able to communicate that faithfully to others who are interested in that setting...The analysis strives for depth of understanding. (p. 1)

This study used a qualitative research methodology as a means of exploring the experiences of administrators and teachers involved in the successful implementation of a whole-school single-sex reform model. Qualitative inquiry was appropriate for this study because of its inductive approach, emphasizing the development of insights and contextual interpretations (Neuman, 2006). By studying the participants’ perspectives and the themes that emerged regarding their understandings, the researcher intended to construct a “substantive theory” (Merriam, 2009; Creswell, 2007) about the phenomenon

so that it might provide a contextual framework to help guide implementation of future whole-school, all-female, single-sex models.

This study used a grounded theory approach and a case study design in order to build a theory of a phenomenon that occurred within the context of a bounded system, or case (Merriam, 2009). The central phenomenon of the study was the implementation of whole-school, all-female, single-sex reform; the case in which the research was conducted was a public, all-female campus with successful student outcomes.

### **Grounded Theory Approach**

Merriam (2009) describes a grounded theory as a study that is intended “not just to understand, but also to build a substantive theory about the phenomenon of interest”. Creswell (2007) explains that grounded theory is the “best approach for research that does not have an existing theory to explain a process...the literature may have models available, but they were developed and tested on samples and populations outside the variables of interest in the study” (Creswell, 2007). A grounded theory approach was selected for this study because the intent is to develop theoretical explanations from the emerging data to contribute to the development of a theory or to provide a framework for future research (Creswell, 2007).

### **Case Study Design**

Case study design is a popular qualitative research design because it is as a window into the lived experience of individuals in a context-bound setting. It is a frequently used design in the social sciences, but has a long, distinguished history across many disciplines (Merriam, 2009). Yin (2003) describes a case study as an investigation of a contemporary phenomenon within its real-life context. Merriam (2009) and

Creswell (2007) explain that the focus is on the exploration of an issue or phenomenon through a bounded system, or case. Case study design was appropriate for this study because it allowed for the investigation of a specific phenomenon (e.g., implementation of a whole-school single-sex reform) through a bounded system (e.g., a single campus). The case study design was also appropriate for the grounded theory framework due to its inductive nature, which allowed for concepts or ideas to emerge from the examination of the data, which is grounded in the context of the study itself (Creswell, 2007).

**Strengths and limitations of case study design.** The case study approach is a widely used method, with a long history in the social sciences, particularly in educational research (Creswell, 2007). Stake (1981) describes two of the unique benefits of knowledge learned by case study research. It is:

- (1) Concrete – Readers can identify with case study knowledge because it is concrete and experiential, unlike other abstract research designs, and
- (2) Contextual – Much like our experiences, case study knowledge is colored by context, making it recognizable and less abstract (p. 35-36).

The most notable limitation of case study design is that researchers are reluctant to generalize case study findings, though the use of thick, rich descriptions does contribute to the transferability of the findings to settings with similar context (Creswell, 2007; Lincoln & Guba, 1985; Merriam, 2009). Another challenge of qualitative case study design is the selection of the case, as there may be several possible candidates (Creswell, 2007). In this study, the number of schools that could serve as possible candidates was inherently limited due to the nature of the topic. There are only 67 public, all-female campuses in the United States. The pool was further limited by narrowing the candidates

to Texas schools with successful student outcomes, as evidenced by an Exemplary accountability rating in 2010-2011.

### **Site and Participant Selection**

This study used two levels of selection: (1) the case study site, and (2) the participants. The site selection occurred first. The participants for the study were selected using the methods described below.

#### **Case Study Site Selection**

This research focused on the phenomenon of implementation of a whole-school, all-female, single-sex reform on a public campus that produced successful student outcomes. This phenomenon is intrinsically bounded by its occurrence on a (now) single-sex public school campus with successful student outcomes. The site selection proceeded first by using criteria-based, purposive methods to generate a pool of potential sites and then convenience sampling to select a final site. The primary criterion for site selection was that the site must be a public, all-female campus with successful student outcomes, as evidenced by the highest rating on the state accountability in 2010-2011. The 2011 accountability rating was used as the selection criteria because public campuses and districts in Texas were not assigned accountability ratings in 2012 due to the change in the Texas state assessment system from the Texas Assessment of Knowledge and Skills [TAKS] to the State of Texas Assessments of Academic Readiness [STAAR]. Only campuses in Texas were considered for the site of the case; consequently, the pool of available all-female, single-sex campuses in Texas limits this research. Using the pool of sites that met the criteria for inclusion in the study, the final site was selected through convenience methods.



## **Sampling and Participants**

This study used purposeful, theoretical sampling of participants utilizing a referral, or “snowballing”, technique to generate potential contributors. The sampling for this study may be described as purposeful since individuals were selected because “they can purposefully inform an understanding of the research problem and central phenomenon in the study” (Creswell, 1997). Sampling in grounded theory studies is guided by theoretical sampling, which entails the selection of participants based on their ability to be a representative of the phenomenon that has been selected for the study (Corbin & Strauss, 1990). The phenomenon of interest in this study is the implementation of whole-school, all-female, single-sex reform models on a campus with successful student outcomes. Straus and Corbin (2008) note, “Theoretical sampling is based on the premise that data collection and analysis go hand in hand” (p. 145). The researcher began the study with a general target population of subjects chosen by their obvious relevance to the research (Merriam, 2009, p. 79). Once the initial participants were identified and data collection began, the researcher identified subsequent participants using referrals. The researcher verified that all participants met the criteria for inclusion in the study prior to contacting them.

In order to develop a theory from the data, participants in the study must have experienced the implementation of a whole-school, all-female, single-sex reform model as a district or campus-level employee. The study sample began with a total of six (6) interview participants and ten (10) open-ended questionnaire participants. In order to triangulate the sources of data, the sampling for the interviews included one (1) district-level administrator, (1) campus-level administrator, and four (4) teachers. District-level

administrator and campus-level administrator interview candidates were selected by their ability to inform the research and by their willingness to participate, as there are very few candidates for both. The researcher selected teachers for interviews based on their ability to inform the research, the referral of initial administrative participants, and their willingness to participate. Due to limitations of the available sample, the number of participants in the open-ended questionnaire was limited to ten (10) teachers. Open-ended questionnaire participants were selected based on their ability to inform the research, the recommendation of the campus principal, and their willingness to participate.

### **Data Sources**

Sources of case study data can take on many forms, including participant and nonparticipant observation, interviews, historical and narrative sources, and journal writing (Willis, 2007). The primary source of data for this grounded research study was interviews (Creswell, 2007). This research relied on data from an open-ended questionnaire and a review of documents to help confirm themes revealed through an analysis of interview data.

### **Interviews**

Interviewing is a necessary form of data collection when we are interested in how people interpret past events that are impossible to replicate (Merriam, 2009). Furthermore, it plays a central role in the data collection in grounded theory studies (Creswell, 2007). This study used semi-structured interviews, which allowed the researcher to predetermine questions in advance, but also to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas (Merriam, 2009).

Interview participants included one (1) district-level administrator, one (1) campus-level administrator, and four (4) teachers. The researcher conducted a primary, semi-structured interview with each of the six participants, and a follow-up dialogue to confirm understandings.

### **Open-Ended Questionnaire**

In order to maintain the strictly qualitative nature of this study, additional data were collected through an open-ended questionnaire. Tashakkori & Teddlie (2003) describe a qualitative questionnaire as “unstructured, exploratory, open-ended, and in-depth”. In open-ended responses, respondents provide answers in their own words and may provide information that is not constrained by any preconceptions held by the researcher (Tashakkori & Teddlie, 2003). Open-ended questionnaires have several strengths as a method of data collection, including perceived anonymity and the possibility of more candid responses than interviewing. It is also a practical alternative to the interview, allowing the researcher to reach a much greater number of participants. The use of open-ended questionnaires also reduces the time needed for data analysis by eliminating the need to transcribe. Weaknesses include the possibility of vague responses, less flexibility than interviewing, and a potentially low response rate.

The use of an open-ended questionnaire was chosen as another data collection method for this study to allow for the inclusion of a greater number of participants who experienced the implementation of the whole-school single-sex implementation. Questionnaire responses were only solicited from potential participants who were still employed by the district. Data obtained from the open-ended questionnaires were used to verify themes that emerged from analysis of interview data.

## **Document Review**

Documents produced independently of the research study are a valuable source of data in qualitative research because they are nonreactive and grounded in the context of the study. Information obtained from documents can be used in a similar manner as data obtained through interviews. A review of documents offers a researcher the ability to obtain additional data that can “furnish descriptive information, verify emerging hypotheses, advance new categories and hypotheses, offer historical understanding, track change and development” (Merriam, 2009, p. 155).

There are several potential weaknesses of documents as a source of data. Since documents are often not produced for the purpose of research, the information they offer may not be useful to the researcher, or they may not provide data that assists the researcher in verifying emerging themes. Also, there may be insufficient documentation of a phenomenon. Guba and Lincoln (1981) suggest, “If no documents exist, however, or if the documents are sparse or seem uninformative, this ought to tell the inquirer something about the context (p. 234-235).

## **Methods of Data Collection**

The researcher collected data over a four-week period, visiting the case site on four separate occasions. Data were gathered in the form of interviews, a review of documents, and by an open-ended questionnaire that was administered via a secure electronic survey administration tool. The researcher also kept detailed journal of theoretical memos to record initial interpretations developed during the data collection process (Merriam, 2009). This journal was also used to document thoughts and ideas

about the evolving theory throughout the data analysis and coding process (Creswell, 2007).

As the researcher simultaneously collects, codes and analyzes data in a grounded research study, this study was designed to be flexible to allow for the natural development and integration of a substantive theory (Merriam, 2009). Although the initial interview protocol was developed prior to the study, open-ended questions on the questionnaire were developed using data from the initial interviews to further illuminate developing themes and categories.

### **Institutional Approval**

To ensure that appropriate steps were taken to protect the rights and welfare of participants, the researcher completed the steps necessary to obtain approval from the Institutional Review Board (IRB) at the University of Texas at Austin. The researcher also contacted the selected district and completed the required application needed to conduct external research.

### **Interviews**

Once consent to conduct research was granted by the district, the researcher relied on the school district and campus to assist in identifying individuals who were employed as either a district-level administrator, a campus-level administrator, or a teacher who experienced the implementation of the whole-school, all-female, single-sex reform model. Interviews were conducted with one (1) district-level administrator, (1) campus-level administrator, and four (4) teachers. District-level administrator and campus-level administrator interview candidates were selected by their ability to inform the research, their willingness to participate, and by the recommendation of the district superintendent.

The researcher selected teachers for interviews based on their ability to inform the research, the referral of administrative participants, and their willingness to participate. Special consideration was given to the two candidates who were also parents due to their unique perspectives.

Prior to data collection, the researcher scheduled a meeting with the superintendent of the participating school district to discuss the study and to solicit referrals for the administrator interview participants. The district superintendent referred the researcher to the current principal of the case study site and to a retired district-level executive who oversaw the implementation processes. Study participants were contacted either in-person or over the telephone to secure a commitment to participate and to schedule the initial interviews. To facilitate the interview process, the researcher met with each participant at the time each preferred, as well as at the location that offered the most convenience for them. In short, the researcher scheduled the interviews according to the needs and preferences of the interviewees. Initial interviews followed a semi-structured format using pre-established interview protocol, which are included in Appendix D. Prior to the study, interview protocol were peer reviewed by a fellow doctoral student in educational administration to ensure that the questions adequately solicited the attitudes and traits needed to inform the research (Fink, 2009).

Each interview began with an explanation of the purpose of the research. All interview participants completed an informed consent prior to participating in the study, which is included in Appendix B. The initial interview sessions lasted between thirty minutes and an hour and thirty minutes, depending on the depth of the participant's

responses. Interviews were tape-recorded with the permission of the interview participants.

A follow-up discourse was conducted as a means of checking the researcher's understanding of the responses gathered by participants in the first round of interviews. The researcher presented initial understandings and a written summary of participant perceptions to candidates via email in order to afford them the opportunity to review and clarify their responses. This strategy was used to ensure that the participant's perceptions were portrayed accurately.

### **Open-Ended Questionnaire**

In order to verify themes that emerged from the initial interview data, additional data were collected through an open-ended questionnaire. Responses from the initial interviews were used to inform the open-ended questions used in the survey instrument, which can be found in Appendix F. In order to ensure the clarity of the language, the open-ended questionnaire was peer reviewed by a fellow doctoral student in educational administration prior to administration to participants (Fink, 2009).

The researcher emailed ten (10) participants who were identified by the campus principal, but who were not contacted for an interview, to respond to the open-ended questionnaire. The ten (10) candidates received an email containing the informed consent form and a hyperlink to the secure survey website. The informed consent form described the survey's purpose, procedures, potential benefits and risks, and confidentiality of responses, and can be found in Appendix C. The researcher received a waiver of documentation of informed consent for the open-ended questionnaires.

Data from the questionnaire were collected electronically via secure survey administration software for ease of access and to ensure the confidentiality of participant responses. The data analysis from the open-ended questionnaire responses was used to triangulate data and verify emerging themes. While the researcher found the survey responses to be meaningful and useful in verifying emerging themes, only four (4) candidates chose to participate in the open-ended questionnaire.

### **Document Review**

The third data collection method used in this study was a review of documents. The intent of the document review was to verify emerging findings based on interview data (Merriam, 2009). Documents for the study were obtained through campus principal and via the Internet. The types of documents reviewed in the study include campus forms, informational literature, professional development calendars, student survey results, and student/parent handbooks. A list of the documents reviewed in the study is located in Appendix F.

### **Data Analysis**

Data analysis for this study was an ongoing process that began with the data collection process. Lincoln and Guba (1985) assert that analysis must start on day one of the project and continue throughout the project. Data analysis in a grounded theory study proceeds in stages, beginning with open coding, then axial coding, and finally selective coding (Strauss & Corbin, 1990). The process of data analysis was guided by the process outlined by Strauss and Corbin (1990, 2008) that prompts the researcher to identify a core category related to the phenomenon of interest, causal conditions, strategies, and consequences. During this process, the researcher kept a theoretical journal to write



down ideas about the emerging themes, using this tool to assist in developing theoretical explanations of relationships among categories built by a logical chain of evidence. The substantive theory that emerges through grounded research develops during the analysis and coding process. Creswell (2007) describes this practice of memoing as a “process in which the researcher writes down ideas about the evolving theory throughout the continuous process of open, axial, and selective coding”. Although it was not listed as a data source, the researcher also spent a significant amount of time observing evidence of emerging categories of factors that were presented by participants. The data analysis that occurred during the interview process also allowed the researcher to form preliminary themes and categories that were used to inform the open-ended questions. This preliminary analysis also helped guide the researcher to request specific types of documents to review.

### **Memoing**

Throughout the coding process, the researcher engaged in the process of theoretical memoing by keeping a record of ideas and possible propositions related to the data. Strauss & Corbin (1990) describe theoretical memoing as “an integral part of doing grounded theory”. Memos are written about the formulation and revision of the theory during the research process (Strauss & Corbin, 1990). As suggested, the researcher kept a record of memos beginning with the first interview session and continued the process until the end of the research.

### **Coding**

The process of coding began after interviews were completed, open-questionnaire responses were gathered, and all available documents were reviewed. Grounded theory

research uses three basic types of coding: open, axial, and selective (Strauss & Corbin, 1990). This stage of the data analysis began with open coding. The process of open coding allowed the researcher to group data into conceptually based categories and subcategories. After categories were developed through open coding, the researcher used the axial coding process to identify the core category and related causal conditions, strategies, and consequences (Creswell, 2007; Strauss & Corbin, 1990, 2008). Finally, during the selective coding process, all categories are unified around a core category that represents the core category of the study (Strauss & Corbin, 1990). Then, the researcher took the core category and systematically related it to other categories, validating the relationships and filling in categories that needed further refinement (Strauss & Corbin, 1990, 2008). At the end of the coding process, the researcher created a theoretical model to visually communicate the wide range of conditions and consequences related to the central phenomenon (Creswell, 2007; Strauss & Corbin, 1990).

During the data analysis process, the researcher took necessary precautions to ensure the confidentiality of participant responses. All identifying information was separated from questionnaire and interview responses by assigning codes to respondents and using the codes to link them to their responses (Fink, 2009). Data obtained from the study were stored in a locked file. To further protect the confidentiality of the data, code books and consent forms were stored in a separate locked file.

**Open coding.** During the open coding phase of the data analysis, the researcher examined the interview transcripts for categories of information supported by the text. Breaking apart the data, the researcher delineated concepts that represented blocks of data (Strauss & Corbin, 2008). Using the constant comparative approach described by

Creswell (2007), the researcher attempted to “saturate” the categories, looking for instances that represent the categories until new information obtained from the text did not provide further inside into the categories developed (p. 160).

***Categories of responses.*** Interview transcripts were open coded separately, generating independent lists of categories. The lists were then compared to determine which categories they had in common and what categories could be merged. By compiling the categories that emerged from each of the transcripts, the researcher then created a composite listing of categories. Using the composite listing, the researcher assigned codes and colors to the categories and created a code legend. Using new copies of unmarked transcripts, the interview data was coded a second time with the intent of saturating the categories, identifying subcategories, and developing a comprehensive list of categories that characterize the collective responses. A list of the coding categories that emerged during open coding may be found in Appendix G.

***Axial coding.*** The categories that emerged during the open coding phase were analyzed to determine their relationship to the central phenomenon, with the purpose of revealing the core category. The core category then becomes the basis for the theoretical explanation to be developed. This was done by analyzing the relationships between concepts and integrating them into a “unified theoretical explanation” (Strauss & Corbin, 2008, 207). In this study, the researcher analyzed and grouped the categories according to their relationship to one another and by their relationship to the central phenomenon.

***Central phenomenon.*** The central phenomenon, or phenomenon of interest, in this study was the implementation of whole-school, all-female, single-sex reform. This phenomenon was studied on a public, all-female campus in Texas with successful

students outcomes as measured by receiving the highest rating on the 2011 Texas state accountability system. The types of site selected, data collected, and method chosen by the researcher were done with the intent to study the central phenomenon (implementation of an all-female, single-sex campus) using a successful prototype and to generate a substantive theory explaining factors that influenced the success of this specific implementation.

***Core category.*** Strauss & Corbin (2008) describe the first step in this phase as the identification of the “core category, which represents the main theme of the research. The core category is the concept that all other concepts revealed through data are related to and that has the greatest explanatory relevance and highest potential for linking all of the remaining categories together. Although the central category may, in fact, be a category revealed during the open coding phase of the data analysis, it may also evolve from further study of the categories if the researcher believed that none of the existing categories capture it completely. The most important criteria for determining the core category is that it must be abstract and that all other major categories can be related to it and placed under it. Also, it should have explanatory power over the other categories (p. 104).

In this study, the researcher determined that none of the categories identified during open coding were appropriate to be the core category. Further analysis of the categories revealed that all of the categories were related to a common concept. Although the categories did not necessarily relate to one another, they each related to the central phenomenon, the implementation of an all-female, single-sex campus, in that they each had the same type of relationship with the central phenomenon.

***Causal conditions.*** The researcher analyzed the categories that emerged in relationship to the core category. Using the core category as a guide, the categories were sub-listed by their relationship to each other and to the core category. At this point, the researcher created a list of causal factors, or conditions that influenced the central phenomenon.

***Strategies.*** During the axial coding process, the researcher searched for strategies that address the phenomenon, the context and intervening conditions that shape those strategies, and the consequences of undertaking those strategies (Creswell, 2007). Due to the complex nature of the central phenomenon, or implementation of an all-female, single-sex campus, the researcher identified three stages that occur during the implementation process: (1) Pre-implementation planning, (2) Campus preparation, and (3) Campus model implementation. The strategies that were revealed through the axial coding phase were then related to each of these stages of implementation in the final theoretical model.

***Consequences.*** The consequences of the central phenomenon were identified as outcomes specifically related to students. Outcomes related to other stakeholders were not specifically listed as outcomes; however, the reflexive nature between the student outcomes and other factors of influence was noted.

### **Selective Coding**

During the selective coding phase, the researcher examined the central phenomenon, or the implementation of an all-female, single-sex campus, and its relationship to the causal conditions, strategies, and consequences identified through the data. During this process, the researcher created a visual representation of the phases of

the central phenomenon, what strategies occurred during those phases, how the causal conditions influenced the phenomenon, and how these related to the outcomes.

This phase of coding was an involved process that took place in tandem with the axial coding phase. It involved several modifications to the visual representation as the researcher analyzed relationships, thought, reflected on theoretical memoing, and re-examined the data.

### **Strategies to Promote Trustworthiness**

To have an effect on practice or theory, research studies must be rigorously conducted so that others have confidence in the investigation and results (Merriam, 2009). “Validity” refers to whether research has measured what it was intended to measure, a term commonly used in quantitative and survey research (Golafshani, 2003). While the terms “validity” and reliability” are essential gauges for quality in the quantitative paradigm, the qualitative paradigm focuses on context-specific understandings, not measurement. Lincoln & Guba (1985) argue that positive research language is not consistent with qualitative research, suggesting the use of alternative terms that are more appropriate to naturalistic inquiry. They contend that the goal in qualitative research is to establish the “trustworthiness” of a study by focusing on the credibility, transferability, dependability, and confirmability of a study. Triangulation of data sources and methods establish credibility. Thick, rich descriptions are needed to ensure that the findings are transferable between the researcher and participants. Dependability and confirmability of findings are established through auditing the research process (Lincoln & Guba, 1985).

This study employed the following strategies to promote the trustworthiness of findings: (1) Triangulation, (2) Member checking, (3) Peer review of open-ended questionnaire and interview protocol, (4) Reflective journaling, and (5) Thick, rich descriptions.

### **Triangulation**

Triangulation refers to using multiple investigators, sources of data, or methods of data collection to confirm emerging findings (Merriam, 2009). Methodological triangulation involves multiple data collection methods; in this study, the methods were triangulated by the use of interviews, open-ended questionnaires, and a review of documents. Triangulation also occurred with the sources of information (e.g., interviews with three different types of respondents) by conducting interviews with district-level administration, campus-level administration, and teachers (Willis, 2007).

### **Member Checking**

Member checking involves taking data, analyses, interpretations, and conclusions back to the participants so they are able to judge the accuracy and credibility of the account (Creswell, 2007). Lincoln & Guba (1985) consider member checking to be the “most critical technique for establishing credibility” in qualitative research. The researcher employed Creswell’s (2007) strategy for member checking. The preliminary data interpretations, consisting of descriptions or themes, were provided to the participants and feedback was solicited to ensure that there are no misinterpretations of the data collected during the interview process.

## **Peer Review of Open-Ended Questionnaire and Interview Protocol**

To ensure trustworthiness of data obtained through questioning, the open-ended questionnaire and interview protocols were peer reviewed by a fellow doctoral student in educational administration to ensure that the questions adequately collected the attitudes and traits needed for this research (Fink, 2009). The review focused on the clarity of the questions and overall format. Feedback regarding clarity of language and directions was used to make necessary revisions (Fink, 2009).

## **Reflective Memoing**

The reflective component of theoretical memoing involves the recording of “feelings, reactions, hunches, initial interpretations, speculations, and working hypotheses” (Merriam, 2009). Creswell (2007) describes the act of memoing in grounded research as the process in which the researcher writes down ideas and thoughts about the evolving theory throughout the analysis and coding process. Throughout the process of data collection and analysis, a reflective journal of theoretical memos was kept to journal important ideas, questions, and evolving interpretations. In order to enhance the trustworthiness of this study, the process for reflective memoing also focused on the researcher’s position and relationship to the study, biases, and assumptions that may affect the investigation (Merriam, 2009).

The reflective memoing process was also used to address the issues associated with the researcher as the primary instrument for data collection and analysis in this study. Although there are advantages of this characteristic of qualitative research, it is also important to be cognizant of the fact that researchers bring their own biases or “subjectivities” that may impact the study. Rather than trying to eliminate them, the



researcher used the process of reflective memoing to identify and monitor biases and how they may be shaping the collection and interpretation of the data (Merriam, 2009, p. 15).

### **Thick, Rich Descriptions**

To enhance the likelihood of the findings of this study “transferring” to another setting, the researcher focused on providing thick, rich descriptions to help contextualize the study, which will allow readers to determine the extent to which the research findings can be applied to alternative settings (Creswell, 2007; Lincoln & Guba, 1985; Merriam, 2009). To increase the likelihood that findings may be transferred to similar settings, information regarding the case, participants, and findings provide as much contextual detail as possible, while still maintaining the confidentiality of the study,

### **Calendar of Activities**

Data collection and analysis occurred between January and March of 2013. Collection of data through initial interviews began in January and continued through February. The analysis of initial interview data and creation and open-ended questionnaire items began in February and continued through March. Follow-up interview and open-ended questionnaire data collection were completed in March of 2013.

### **Summary**

This chapter provided an overview of the research design, the procedures for data collection, the process for data analysis, and strategies for ensuring the trustworthiness of the study. Chapter Four presents a profile of the case site and a detailed description of the interview participants.

## **CHAPTER FOUR**

### **RESEARCH CONTEXT**

In order to contextualize the research findings presented in Chapter Five, this chapter provides an overview of the history and functions of the Texas-based Foundation for the Education of Young Women, as well as a detailed description of the case site and interview participants. Although the transferability of this study relies heavily on the use of thick, rich, descriptions, the researcher took measures to protect the anonymity of participants and the confidentiality of responses by assigning pseudonyms to the school district, campus, and individual participants. Further, given the limited number of sites that met the selection criteria for inclusion in the study, in order to minimize the likelihood of deductive disclosure (Kaiser, 2009), the researcher removed or masked references to any district, campus, or participant characteristics that did not significantly impact the contextualization of the findings.

#### **Foundation for the Education of Young Women**

Texas philanthropists Lee and Sally Posey founded the Foundation for the Education of Young Women [FEYW] in Dallas. At the time, Lee was serving as the Chairman Emeritus for Palm Harbor Homes. In early 2001, he read about the success of the Young Women's Leadership School in East Harlem. Ann and Andrew Tisch created the Harlem campus through a partnership with the New York City Board of Education in 1996. The school was heralded for its success of having 100% of its graduating classes accepted into four-year colleges and universities. Intrigued, Lee and Sally Posey contacted the Young Women's Leadership Foundation in New York and visited the

campus in Harlem. They returned to Dallas, inspired by both the campus and the foundation.

Mr. Posey was raised by a single mother and had a brother. His story is, when he was young, he would go to school, but wouldn't stay and he'd go out and play basketball. He called himself a 'little hoodlum', but not really getting into trouble. A preacher...befriended him and helped him get back on track and back in school...he always said that if he ever became successful that he wanted to do something to give back to young women who were single and not educated- his mother had no college education. (Interview #2, 56-64)

In 2002, the Foundation for the Education of Young Women was established as a 501(c) partnership with the Dallas Independent School District. In 2004, the Irma Rangel Young Women's Leadership School opened in Dallas. Since then, the foundation has partnered with school districts to open campuses in Austin, San Antonio, Lubbock, Fort Worth, and Houston (Foundation for the Education of Young Women [FEYW], 2012b). "His dream was to open up one in every major city in the State of Texas" (Interview #2, 69-70).

The FEYW model promotes all-female, single-sex schools of choice through public-private partnerships around the state. The foundation operates using established procedures to guide the creation and execution of partnerships with public school districts in Texas (Figure 4).

**The Foundation for the Education of Young Women -  
Partnership Procedures**

1. Through FEYW, urban school districts agree to open and operate an all-girls, college preparatory, public school.
2. FEYW supplies the expertise to bring the school to fruition and provides grant funding for the planning year and the school's first three years of operation.
3. Once operational, the district funds and staffs the school according to district guidelines.
4. FEYW works with each school to build local support within the school district and community, including a vibrant local Advisory Council.
5. FEYW and the local Advisory Councils work to raise the funds necessary to provide crucial educational enhancements for each school.

**Figure 4: Foundation for the Education of Young Women – Partnership Procedures (FEYW, 2012b)**

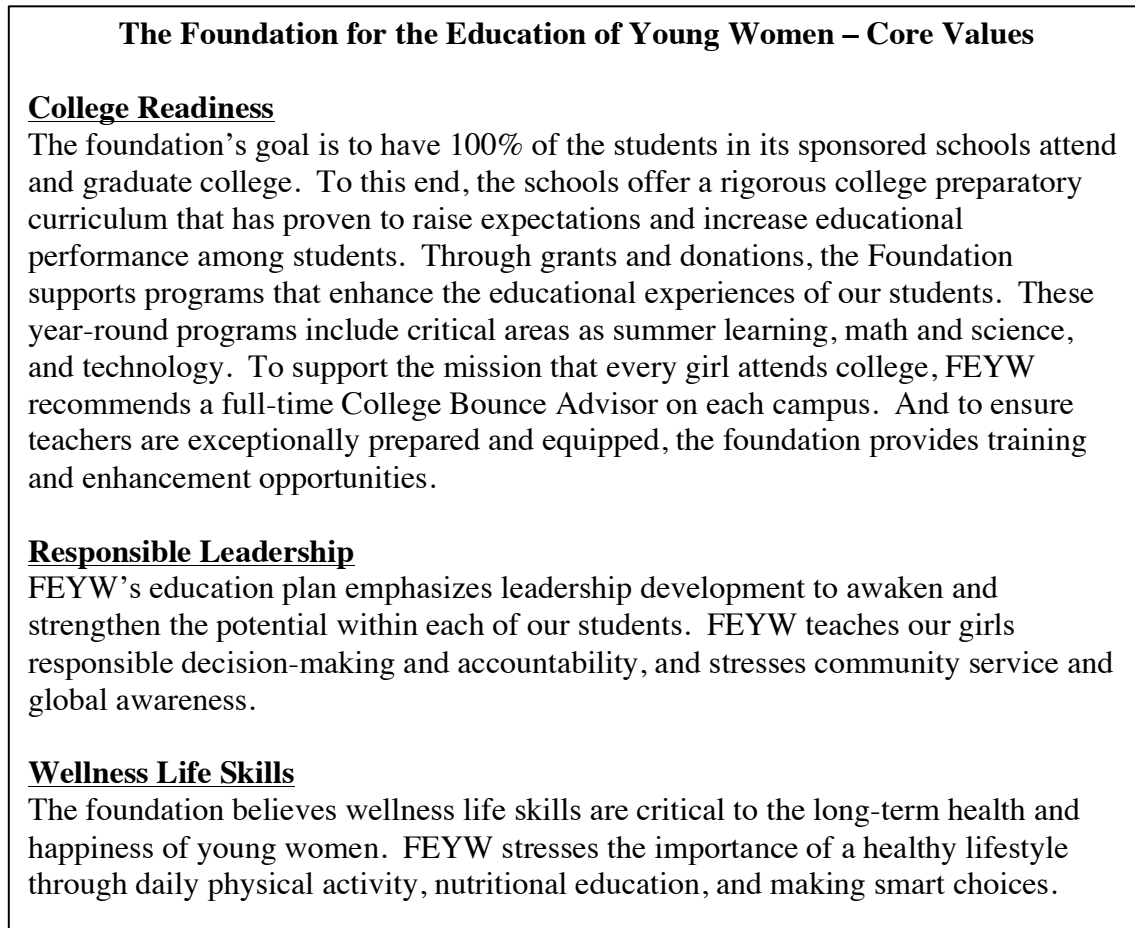
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When school districts enter into a partnership with the FEYW, they must implement a very specific campus model in order to continue receiving the grant funding.

A district-level executive leader who participated in this process remarked:

[Mr. Posey] was such a wonderful, warmhearted person but a very [sharp] businessman...and he was very specific about what the school was and put that in the MOU [Memorandum of Understanding]. He was very specific about what the expectations were and made it very clear to the district [that] if you do not honor the MOU, you *will* return the money. This is not for fun or 'Let's try this and see if it works'...you [the partnering districts] need to be as committed as we [the FEYW] are. (Interview #2, 82-86)

Once established, all partner campuses are built upon the core values established by the FEYW: College Readiness, Responsible Leadership, and Wellness Life Skills (FEYW, 2012a).



**Figure 5: The Foundation for the Education of Young Women – Core Values (FEYW, 2012a)**

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### **College Readiness**

College readiness is one of the core values for FEYW schools. 100% of the students who attend FEYW schools are expected to graduate from a four-year college or university. Partner campuses must offer a rigorous, college preparatory curriculum that will build the foundation for success in college. In order to ensure access to career fields

typically underrepresented by women, the academic focus of this rigorous curriculum is math, science, and technology. The FEYW also encourages that partner campuses focus on study skills, personal academic organizational strategies, and tools and strategies necessary to navigate the college application and admissions processes (Ford Academy for Young Women [FAYW], 2012).

### **Responsible Leadership**

Responsible leadership is the second core value for all FEYW schools. Campuses focus on instilling leadership qualities in young women by encouraging active participation in extra-curricular activities and service learning opportunities. In addition to participating in national student clubs, such as the National Honor Society, campuses are encouraged to support student-led and generated organizations. Leadership activities are also infused in classroom activities and developed through summer enrichment programs (FAYW, 2012).

### **Wellness Life-Skills**

The third core value for FEYW schools is wellness life-skills. The foundation believes that physical well-being and overall wellness are integral to the success of students. Campuses are encouraged to teach students to make decisions that are based on core values and personal health. Students participate in courses and activities focused on health, physical fitness, and emotional health. Campuses are also encouraged to provide unique and innovative physical fitness activities, such as yoga and martial arts (FAYW, 2012).

### **Case Study Site: Ford Academy for Young Women**

This study took place at a school that resulted from a partnership between Lonestar ISD and the Foundation for the Education of Young Women. The Ford Academy for Young Women is a public, all-female secondary campus located within Lonestar ISD, a school district in Texas serving more than 25,000 students. The school district is located within an urban setting in one of the top thirteen largest Metropolitan Statistical Areas in the state of Texas (Texas Department of State Health Services [TDSHS], 2006).

The campus received the highest, Exemplary, rating on the state accountability system in 2011 (Texas Education Agency [TEA], 2012). The 2011 accountability rating was used as a selection criteria since public campuses and districts in Texas were not assigned accountability ratings in 2012 due to the change in the Texas state assessment system from the Texas Assessment of Knowledge and Skills [TAKS] to the State of Texas Assessments of Academic Readiness [STAAR]. In order to receive the Exemplary rating in 2011, Ford Academy had greater than 99% of their students meet the state standard on every assessment administered in grades 6, 7 and 8 (Table 3).

<b>TAKS 2011 Met Standard – Ford Academy School for Young Women</b>		
<u>Grade 6</u>	<u>State</u>	<u>Campus</u>
Reading	85%	>99%
Mathematics	83%	>99%
All Tests	76%	>99%
<u>Grade 7</u>		
Reading	86%	>99%
Mathematics	81%	>99%
Writing	93%	>99%
All Tests	75%	>99%
<u>Grade 8 (First Administration Only)</u>		
Reading	89%	>99%
Mathematics	80%	>99%
Science	79%	>99%
Social Studies	95%	>99%
All Tests	69%	>99%

**Table 2: TAKS 2011 Met Standard – Ford Academy School for Young Women (TEA, 2012)**

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When Lonestar ISD made the initial decision to open an all-female, single-sex campus, they worked closely with an Executive Director for the FEYW and the LISD Board of Trustees. It took several months for the district to work through the legalities of the Memorandum of Understanding (Interview #2, 47-49). A district-level executive leader who participated in the study explained:

The grant was a million dollars and they gave the district two hundred and fifty thousand dollars each year for four years. That money the first year went to fund the principal and a counselor and secretary the very first year...the first principal was a lady from [West Texas]...we specifically sought out someone who reflected the little girls who we knew would be coming into this school, a very



similar background...so [she] came on board and the skeleton crew was housed at one of our buildings. (Interview #2, 92-98)

While the new Ford Academy administration worked in an office building to begin the hiring and student selection process, the district decided where to house the new academy. When asked if the district already knew where the campus would be located during the MOU creation, the district-level executive leader replied:

No, they didn't. It was blind faith. [At the time], we were like, 'Let's not worry about that. We'll find it.' Because, at the same time, we knew we were closing campuses and we knew we had to, so there would be options. (Interview #2, 153-155)

Today, the picturesque Ford Academy campus is nestled in a well-established neighborhood in the heart of the city on a campus that previously served as both a coeducational junior high school and a middle school. The surrounding neighborhood is quaint and quiet, with older, well-kept bungalow-style homes built in the 1920s, 30s, and 40s. The neighborhood is adjacent to an area of the city that was once a thriving business district, though it has declined over the last fifty years. There are signs of modest gentrification surrounding the school, with recently remodeled homes evident throughout the neighborhood. The community is also known for the occasional "eclectic" home and boasts a very politically active population. The neighborhood also has a community development organization whose purpose is to combat the deterioration of the community and to promote the revitalization of the neighborhood by working to attract new businesses, assist in housing redevelopment, enhancing neighborhood parks,

as well as address neighborhood safety and education concerns (Ford Neighborhood Community Development Corporation, 2012).

When Lonestar ISD made the decision to close the community's middle school and create the all-girls school, there was significant political pushback from the neighborhood. When asked about the site selection, the district-level executive leader recalled:

We...closed [the campus] as a middle school because of declining enrollment over five years and we couldn't afford to keep that building. So, we moved those students to another school and created the closed school as the all-girls school. That was the best option because of the secondary setting, and it already had science labs and the gym and fine arts building. Although there were some elementaries we could have used, it would have cost us [the school district] more money. So, we were trying to make it the most cost-effective and [make sure] it has the capacity to grow into the high school they need. That was a challenge because there was a lot of negativity against the girl's school. We just kept moving forward because we were so committed to the project, but it was almost like we had so many things working against us: angry parents because their school had closed [and] principals who were not supporting the concept because they felt they were losing girls from their schools. (Interview #2, 145-149, 155-165)

Despite some community pushback, the neighborhood middle school closed and re-opened as Ford Academy with approximately 150 female students in grades 6 and 7 from primarily low-income families from all over the district and surrounding

metropolitan area. The campus added a grade-level each year. At full capacity with grades 6 through 12, the academy is not permitted to exceed a total of 700 girls. At the time of the study, 91% of the students at Ford Academy were students of color, which includes Hispanic and African American students. 77% of the student body came from economically disadvantaged families. 30% of the campus was identified as Gifted and Talented (FAYW, 2012). The campus opened with six teachers and currently has sixteen teachers.

In 2011, the campus received an Exemplary rating on the state accountability system for exceedingly high student scores in all areas. In previous years, in addition to receiving an Exemplary rating, the campus received the Gold Performance Award from the Texas Education Agency for Math, Reading, Writing, Science, and Social Studies. The campus received the highest TAKS scores in the Lonestar ISD for Math, Reading, and Writing. Ford Academy also has the highest attendance rating in the school district (FAYW, 2012).

### **Ford Academy Campus**

The Ford Academy for Young Women is situated on a repurposed, older campus that is pristine and inviting. The two-story building is full of natural light, the floors glisten, and visitors are compelled to walk leisurely down the corridors to admire the pictures and student-made artwork. A beautiful, wide staircase with windows overlooking an outdoor garden area highlights the front hallway of the campus.

The campus has the benefit of well-equipped science labs, multiple athletic practice fields, a theater, and a gymnasium due to the fact that it previously served as both a junior high and middle school. Students in grades 6-8 take the majority of their

courses on the first floor of the building, which consists of two long corridors that branch off from either side of the front entrance. The second floor of the building is reserved for high school students.

### **Campus Programs and Activities**

Ford Academy offers an extensive array of campus programs and activities that are intended to help students receive a well-rounded educational experience. The collection of campus programs and activities is shaped by the core values of college preparation, responsible leadership, and wellness life-skills. These include: (1) AVID, (2) Girls Inc., (3) Health and wellness activities, (4) Leadership activities, (5) Summer academies and camps, (6) Community service, (7) College and career counseling, and (8) Parent service hours.

**Advancement Via Individual Determination [AVID].** The AVID program is a nationwide college readiness program focused on providing research-based instructional and learning strategies to help bolster college readiness, admissions, and retention. The AVID College Readiness program is available for elementary grades through higher education. In 2013, AVID reported serving over 700,000 students in more than 4,900 schools and 28 postsecondary institutions in 46 states, the District of Columbia and across sixteen other countries/territories (Advancement Via Individual Determination [AVID], 2013).

As an AVID campus, Ford Academy introduces students to organizational strategies, note-taking skills, and study-group activities. Teachers on the campus attend a weeklong summer institute focused on equipping them with research-based methods of effective instruction and student motivation. Students enrolled in the AVID program are

required to take at least one advanced-level course, which is a given at Ford Academy because all core courses are designated as Pre-AP courses. A key component of the program is an elective period that provides tutoring by college students (AVID, 2013).

**Girls, Inc.** Girls Inc. is an organization committed to inspiring girls to be “strong, smart, and bold” through programs and experiences that prepare girls to navigate gender, economic, and social barriers. The program provides research-based curricula delivered by trained, mentoring professionals in a positive, all-female environment. The goal of the program is to equip girls with the skills and habits of mind needed to achieve academically and to lead healthy and physically active lives. The program also focuses on helping young women discover an interest in Science, Technology, Engineering, and Math [STEM]. In 2013, Girls, Inc. reported serving over 125,000 girls ages 6-18 in locations across the United States and Canada (Girls, Inc., 2013).

The Ford Academy partnership with Girls, Inc. provides students with leadership development and wellness activities and lessons by trained mentors twice a week.

**Heath and wellness activities.** Ford Academy offers a variety of activities focused on health and wellness, operating under the belief that both are integral to the success of students. Students benefit from coursework in health, physical fitness, and emotional strength offered through a variety of community partnerships.

A local organization focused on supporting health and wellness activities for families presents a series on Lifestyle, Exercise, Attitude, and Nutrition at the academy. The purpose is to positively impact 6<sup>th</sup> and 7<sup>th</sup> grade students to become aware of and understand the importance of eating well-balanced meals and exercising daily. The students also learn how their bodies work, the role exercise plays in their overall health,

and why sleep and drinking water are vital to their health. They also learn the differences between “real” and factory-made foods, how to read labels, and how to prepare healthy snacks. The students learn how their attitudes can positively or negatively impact their overall health.

Ford Academy also partners with another non-profit community-based organization committed to social and physical well-being of populations at risk for diabetes and obesity. Through this partnership, students learn the importance of eating a healthy diet and exercising regularly. Students participate in organized physical fitness activities and receive lessons on topics such as nutrition and self-esteem. The partnership includes a Family/Community component and offers families a newsletter with healthy cooking tips, physical activities, and diabetes prevention lessons. Families are also invited to attend four meetings that are held throughout the school year. Activities and topics covered during the family meetings include diabetes prevention, healthy cooking ideas, and activity ideas for families.

Students at Ford Academy also participate in martial arts. The training not only provides physical wellness and motor skills development, but also teaches life skills such as respect, honor, integrity, discipline, and perseverance. The program is intended to help students build self-discipline, confidence, and teach them self-defense techniques.

Finally, Ford Academy developed a multi-lateral partnership with several local community organizations to offer a program to 6<sup>th</sup> graders and their parents. Through this partnership, sessions are offered five times a year and participants are presented with information that supports healthy social and emotional growth for students and parents.

**Leadership development activities.** Leadership activities are designed to develop students' behavioral characteristics, communication skills, and time management capacity. Girls at Ford Academy are required to participate in two clubs, two sports, or one of each. In addition to having many activities from which to choose, students are encouraged to create their own clubs and service learning opportunities. Extra-curricular activities include National Honor Society, UIL Academic competitions, Girl Scouts, Robotics Club, Equestrian Club, Student Council, Cooking Club, Science Club, Spanish Club, Technology Club, Reading Club, Mu Alpha Theta mathematics honor society, National Spanish Honor Society, and National Art Honor Society. Athletic opportunities at Ford include basketball, volleyball, golf, and tennis.

The campus also offers a guest speaker series designed to inspire students. This series features prominent women in the community. Speakers typically present during the AVID “prep” period on the first Friday of every month.

All young women at Ford participate in an AVID prep period and have a “prep teacher” assigned to her. This class serves as an advisory period designed to help create a nurturing campus culture and is a time for students to discuss important issues they are facing. The curriculum for the course consists of leadership, health and wellness, and college readiness activities. This period also serves as the setting for AVID tutorials.

**Summer academics and camps.** Each year, the campus provides summer academics and students are expected to attend their grade level academy. Camps are provided at no cost to the student. The grade-level academics focus on academics, as well as the campus core values of college preparation, responsible leadership, and wellness life-skills.

Although attendance is not mandatory, there are also numerous other summer camp opportunities provided to students through local partnerships and foundations. One such partnership with a large corporation and a local university allows students to participate in a five day “Crime Scene Investigation” camp. The camp serves as a way to encourage and improve students’ science, technology, engineering, and math skills. During the week, campers are equipped with lab coats, goggles, and CSI badges and kits. During the closing ceremonies, students showcase their final products and share their personal reflections on how science, math, and technology play a part in today’s career fields. Families fill the campus auditorium during the CSI camp closing ceremony.

Students are also invited to participate in a summer program provided through a partnership with PREP-USA that is designed to motivate and prepare middle and high school girls for success in advanced studies leading to careers in the STEM (Science, Technology, Engineering, and Mathematics) fields. The summer program is eight-weeks long and promotes abstract reasoning and critical thinking skills using hands-on, relevant activities. Prep-USA is a nationwide program that is conducted at colleges and universities across the country and is focused on reaching out to Hispanics, African-Americans, Native Americans, and females who have been historically underrepresented in the STEM career fields (PREP-USA, 2013). Ford Academy students who choose to participate in the summer PREP camp may also be awarded high school credit for their participation.

Another summer opportunity for Ford Academy students is offered through a partnership with Best Buy. Students may participate in a two-day Geek Squad Summer Academy, which offers classes involving computer programming, digital music, digital



photography, and the importance of being responsible consumers of the Internet. Geek Squad Summer Academies also focus on team-building activities and collaboration (Geek Squad Summer Academy, 2013).

**Community service.** All students at Ford Academy are required to complete 100 hours of community service as a part of the graduation requirements for the school. Many students choose to fulfill this requirement in conjunction with their participation in service-oriented student organizations. Students may also choose to complete their hours through church activities, peer tutoring or mentoring, environmental projects, blood drives, or other volunteer work.

**College and career counseling.** The Ford Academy for Young Women is committed to providing students and their parents with the necessary tools to meet college entry requirements and to graduate from a four-year college or university. The campus offers parents and students college-counseling sessions to begin the planning and preparation process. Both parents and students have access to a full-scale College and Career Center that allows them to explore careers and develop plans for the future. The campus also has a full-time college and career counselor, a position that is funded through an external partnership.

**Parent service hours.** Parent service initiatives result in the completion of many projects around campus, greater parent participation in classrooms, and more interaction between parents and faculty. At Ford Academy, parents are required to complete ten (10) service hours per academic year. Service hours are completed on the campus or through activities that benefit the school. This requirement is a part of the Title I Parent Compact and is also a condition of the student's enrollment at Ford Academy. Parents must

complete a “Parent Passport” each year to account for the hours. If a parent is unable to complete his or her service hours, they have the option of paying ten dollars per hours of any unfulfilled time. Students whose parents do not complete the parent service hour expectation will be placed on disciplinary probation. Parents who choose to volunteer on the campus to complete their hours must also complete a criminal background check at the beginning of each year.

### **Interview Participants**

This section provides a description of the interview participants from the case. Participants profiles are factual, however, pseudonyms have been assigned to maintain anonymity. In addition, participants’ characteristics that do not significantly impact the contextualization of the study have been masked.

Interview participants included the current campus principal, a retired district-level executive leader, and four core content area teachers.

#### **Violet**

Violet Maldonado serves as the campus principal at Ford Academy and proudly notes that this is her twenty-third year in education, although her appearance is deceptive of this fact. She is poised and exudes class and professionalism, proudly wearing a blazer that bears the Ford Academy crest. Although her presence is polished and commanding, she is very warm, exuding pride when talking about the campus and the students, whom she refers to as ‘our girls’.

She came to the campus as the principal in its third year of operation. “If you count that planning year, I actually came in the fourth year, and basically it was to start up the high school program. [By that time], the middle school program had been

established” (Ford Academy Interview #1, 9-13). She has now served at Ford Academy as the campus principal for more than two years.

Violet grew up in a coastal city in Texas, earning the honor of being named the valedictorian of her high school graduating class. She moved to the northeastern United States to attend college, earning a Bachelor of Arts from an Ivy League university. After beginning her teaching experience in one of the nation’s toughest urban school districts, she returned to Texas to continue teaching. She went on to earn a Master of Education and administrator certification from the University of Texas at Austin. She spent several years moving her way through the ranks in school administration and had the unique experience of becoming the principal of the high school where she graduated as valedictorian.

After several very successful years as the principal of her alma mater, Violet was recruited to become the principal of Ford Academy, several hundred miles away. “It was a very difficult decision to leave [my hometown]...but, I felt a calling to be here” (Ford Academy Interview #1, 410-412). In its first few years of operation, Ford Academy experienced multiple turnovers in leadership and the district was very diligent in seeking a principal that would both uphold the mission and vision of the school and provide stability to the campus. Violet’s arrival seems to have accomplished both of those goals.

Without a doubt, Violet has a gift for establishing structure and order. A peek into a classroom shows immaculately dressed young women donning knee socks, pleated skirts, and crisp white blouses. Even more notable is the attentiveness and level of active engagement of the students.

Violet gleams with pride and passion when she talks about the young ladies at Ford Academy. “Our girls won their first high school basketball game last night!” she rejoiced. “Trust me...it’s a big deal” (Ford Academy Interview #1, 1-3). Without a doubt, the campus has flourished as a result of Violet’s passion and drive. She looks forward to being the principal for the first graduating class. She added:

They are trailblazers...that’s what we call them. [They] continue to achieve. And achieve at levels that are higher than the district average, higher than the state average. These young ladies have learned to believe in themselves, have learned that with hard work, anything is possible. They have learned that they will have obstacles, sometimes within their own communities and neighborhoods that they have to overcome. But, more importantly, what I like is that they have learned to believe in themselves. (Ford Academy Interview #1, 37, 46-52)

### **Sharon**

Sharon Kelly is an accomplished district-level executive administrator who recently retired after 30 years in public education. She earned her Bachelor of Education from a large university in Texas and a Master of Educational Administration from a small, public university in West Texas. Although she is now retired, she is sought after by districts across Texas to do consulting for strategic planning and leadership development.

Sharon spent 17 years as an elementary teacher in large urban, suburban, and rural districts in various parts of Texas. She spent 16 years as a campus and district administrator, most recently as one of the top executive-level administrators in Lonestar ISD.

During the implementation of the Ford Academy for Young Women, Sharon oversaw all facets of the implementation process from the district-level. She explains:

My involvement was just staying on top of this [implementation] and being the district liaison for FEYW, being the point person for the board [of trustees] for any questions asked and sitting down with them, making presentations to the board, in the principal selection, in the MOU” (Interview #2, 190-193).

Until her retirement from LISD, not only was Sharon integral in the selection of the principal for Ford Academy, that position reported directly to her. As the district-level advocate for Ford Academy, Sharon was responsible for much of the communication regarding the campus, both internal and external. She admits that, at first, there were challenges. “We had a lot of work to do with our principals and within our school community [to ensure them] that we weren’t skimming the cream of the crop” (Interview #2, 103-105).

Even in her retirement, Sharon still works with the Ford Academy advisory council in a consultative manner. Her passion about the mission of the school is contagious.

Again, I go back to being really committed to doing something innovative. It’s going to be hard, it’s not going to be easy, and there’s no guidebook for how to create it...but, it’s exciting and very rewarding and I’m thankful [the president of the Board of Trustees] wanted me to continue helping the school. (Interview #2, 430-433)

## **Jenny**

Jenny Stewart is a native of the Central Texas area, who attended an all-girls school growing up. After high school, she attended a liberal arts university in Texas, earning a Bachelor of Science degree in Biology. Upon graduating from college, Jenny worked in the medical field for ten years prior to becoming a teacher. When asked about what made her want to make the switch to become a teacher, she replied, “I loved my job. [But], I felt deep down inside that I needed to be doing something more to have a more direct impact on the world” (J. Stewart, personal communication).

In her personal life, Jenny is single and devotes her time to fostering children. “Right now, I have a little baby. If all goes well, I will be able to adopt this child” (J. Stewart, personal communication).

Jenny is in her 13<sup>th</sup> year of education and began working at Ford Academy in its second year serving students. She teaches sixth and seventh grade Science and holds a GT certification. Her heart for her students is apparent. When asked if she believed the childlike nature of the girls at Ford Academy was a good thing, her eyes filled with tears. “Do I think that’s a positive thing? Oh my God, yes. They are able to just be girls and to stay younger longer. I think that’s a very positive thing” (Interview #3, 287-288).

## **Dana**

Dana Morgan is one of the original teachers at Ford Academy. Petite and bubbly, she is originally from northern Arkansas. She has a degree in business administration from her home state, and a Master of Education from the University of Phoenix. Dana decided to become a teacher after she spent some time substituting. “I thought I could make a change because I was disappointed by what I saw in schools” (D. Morgan,

personal communication). A military wife and a mother of two, Dana and her family relocated to Texas from Maryland. She explained:

I actually applied for the math position, but they already hired someone, so I taught social studies for one year. I was the last teacher she [the first principal] hired the summer before we opened school. It was Texas history, which is funny [be]cause I'm not from Texas. (Interview #4, 14-17)

After going through the steps to get her out-of-state certification transferred to Texas, Dana began teaching math at Ford. She has taught most grade levels, but is currently teaching sixth and seventh grade math. She was recently given the honor of being named as an Outstanding Mathematics and Science Teaching Award recipient by the mayor of the city and the county judge. In addition to the recognition for her excellent teaching skills, she also received \$1,000 to use towards innovative lessons for her students.

Dana has the unique perspective of having been at the campus from the beginning and also having a daughter who attends Ford Academy.

### **Heather**

Heather Smith is originally from Indiana. She received her Bachelor's of Elementary Education from one of the flagship universities in her home state. She also has a science certification, as well as a GT certification. She earned a Master's of Science in Curriculum and Instruction from a private university in Texas. She is married and has a one year-old child, and an energetic personality. She rushed into the interview room carrying her freshly microwaved lunch. "I hope you don't mind...I'm multi-tasking," she smiled.

When asked about her educational history, she replied:

This is my tenth year teaching. I taught at an elementary school in fifth grade and I've been at the academy since it opened.

(SL) So, that makes you one of the originals?

Yes, yes, yes! (Interview #5, 6)

A science teacher by trade, Heather has also taught seventh grade Texas History at Ford. She began the current school year teaching eighth grade science, but left Ford Academy during the study to begin working as a district science instructional coach in Lonestar ISD.

### **Victoria**

Victoria Campbell was born in California but moved all over the United States growing up due to having a father in the military. She received a Bachelor of Arts from a university in Kansas with a double major in Spanish Language and Literature and Latin American Studies. She has a master's degree from the University of Phoenix in Computer Information Systems and is working on a second master's in English from a local university.

Victoria became a teacher after spending twelve years in law enforcement before transitioning to education. She wanted to help educate youth and steer them away from the life she witnessed as a police officer. She is teaching for the second time at Ford Academy. She explained:

I'm one of the original teachers. I worked here for two years and left [when] my husband got transferred to [to the East Coast]. We were there for a year and then



came back...so, technically, I'm an original teacher, but I haven't been here the whole time. (Interview #6, 7-11)

Victoria teaches both Advanced Placement English and social studies to the high school students at Ford, though she began teaching sixth and seventh grade English when the campus opened. She also holds a GT certification. When asked if she had a preference for teaching either English or social studies, she replied, "They're intertwined. I'm getting my second Master's in English, though" (Interview #6, 27).

Victoria has an interesting perspective to add because she also has a daughter who attends Ford. She felt very strongly about the safe, nurturing environment that allows the girls to be girls. At one point in the interview, when asked about the benefit of the environment provided by Ford Academy, Victoria pointed to a picture on the wall. It was a picture several Ford Academy students laughing and jumping on a trampoline. "That picture says it all," she said, fighting back tears. "That is what our girls can do- *be girls*" (Interview #6, 231).

### **Summary**

This chapter provided a description of the case study site, its history, and a sampling of the program and activities that occur on the campus. A detailed description of the interview participants involved in this research study was also provided. Chapter Five will present an overview of the research questions, the perceptions of the interview participants in relationship to the research questions, and the major findings of the study.

## **CHAPTER FIVE**

### **FINDINGS**

The purpose of this chapter is to discuss the findings of the study. The research findings presented are derived from qualitative data collected in accordance with the methods set forth in Chapter Three. A description of the research context in Chapter Four and the researcher's commitment to accurately representing the participant's perspectives are both methods used to contribute to the overall transferability of these findings.

#### **Research Questions**

The participants in this study were asked to share their experiences regarding three specific aspects of the implementation of an all-female, single-sex campus. The methodology outlined in Chapter Three describes how the researcher attempted to explore the experiences of stakeholders involved in the implementation of a successful all-female, single-sex campus as a model of whole-school reform. The following research questions were addressed:

1. What are stakeholder perceptions of the factors that influenced the successful implementation of an all-female, single-sex, whole-school reform?
2. What are stakeholder perceptions of the successes experienced during the successful implementation of an all-female, single-sex, whole-school reform?
3. What are stakeholder perceptions of the challenges to the successful implementation of an all-female, single-sex, whole-school reform?

The findings in this study are presented in two parts. In Part I, the individual participants' responses are presented as they relate to each of the research questions. Then, in Part II, the researcher conducted a cross-participant analysis and identified the major themes that emerged.

### **Part I: Individual Perceptions**

#### **Question #1: What are stakeholder perceptions of the factors that influenced the successful implementation of an all-female, single-sex, whole-school reform?**

During the interview process, each of the participants was asked to identify key factors they believed to be critical to the successful implementation of an all-female, single-sex campus. Participants were not provided any specific examples, although the researcher did ask for clarification, when needed. Except when noted, all responses are listed by the order in which the participants communicated them.

**Violet's view of the key factors.** As the principal of Ford Academy, Violet stated that there were several key factors that were crucial to the successful implementation of an all-female, single-sex campus: (1) Common understandings throughout the district, (2) Support from the board of trustees, (3) Committed advisory council with strong community ties, (4) Coordination with district-level offices, and (5) Committed faculty and staff.

***Common understandings throughout the district.*** As a campus principal, Violet stated that establishing a common understanding of the mission, vision, purpose, and expectations of a campus are important with a new initiative. She strongly believed that from the very beginning of creating a single-sex campus, policies and procedures must be

clearly communicated to the teachers, the parents, and the district. This includes an understanding of and clear communication about how the campus is set up.

Those decisions have huge implications. For example, [one of] our sister school[s] is set up as a magnet. What that means for scores, and everything else UIL is that they go back to their home schools and compete with their home schools...so, that school doesn't worry about athletic coaches and things like that.

(Interview #1, 111-115)

Violet not only expressed that decisions such as these must be weighed carefully, but they must also be thoroughly explained so parents and other campuses understand what they mean.

This school was set up as an internal charter school. We have applicants from all over [the local] county, so we compete at whatever the highest level is in the district. For example, if we have a school that is at 5A, we would have to compete at the 5A bracket. (Interview #1, 115-118)

Violet shared that without proper communication, there can be stakeholder misconceptions about what the campus is and is not. She added that, even when things have been outlined and communicated, "The community [and] the district need to understand that every school starting up is going to have growing pains..." (Interview #1, 122-123).

***Support from the board of trustees.*** The Board of Trustees is a locally elected decision-making body within a public school district that provides governance over policies, as well as final approval over the allocation of resources. Contributions of the board of trustees include financial support, but also political support, as well. Violet

noted that "...a board member needs to be assigned [to the campus], or it needs to be addressed up front that this school will be part of said district" (Interview #1, 147-149). She added that even though students on her campus originate from feeder patterns all over the district, and even outside of the district, it was crucial to have a member on the board that viewed the campus community as a part of his or her constituency. She remarked that such a decision was not made at the beginning of implementation, and that once it occurred in year four, it made a big difference in the school's relationship with the Board of Trustees.

***Committed advisory council with strong community ties.*** The Ford Academy advisory council is comprised of women from the community, including businesswomen and philanthropists, who give of their time to support the school. The purpose of the advisory council is to create partnerships with local foundations, businesses, and organizations to help secure community buy-in, as well as financial and in-kind donations. Part of the success students experience at Ford Academy, according to Violet, comes from exposure to instruction and experiences that put them on a level playing field with other students. "It's about exposure, exposure, exposure," she emphasized (Interview #1, 311). In order to provide those types of opportunities, she expressed that the active involvement of a well-connected advisory council was crucial.

Advisory council- that is very instrumental in helping ...establish partnerships out in the community, whether with the universities, museums, or whoever. Those networks are critical in giving our kids those additional enrichment experiences that we want them to have. (Interview #1, 163-167)

Violet strongly believed that many of the opportunities for enrichment, such as summer camps and college visits, would not be possible without the supplementary funding provided through their advisory council.

***Coordination with district-level offices.*** Due to the large amount of campus funding provided by grants and student selection procedures of the school, Violet stated that coordination with district systems needed to be flexible and that it was important for offices to be open to learning how to coordinate, especially with alternative sources of funding.

For example, with the monies that come into our school, if I get a donation for, let's say, an SAT prep course, I had to figure out with the district how to navigate those monies coming in as a donation to get them to pay for a vendor. (Interview #1, 212-215)

She shared that because Ford Academy differed so greatly from many of the traditional campuses, district offices sometimes had a difficult time understanding how to work with her campus.

***Committed faculty and staff.*** Throughout the interview, Violet stressed the importance of hiring the right staff members and ensuring that they were committed. In this case, commitment refers to giving of oneself to a cause, or to work that supports that cause. She stated, "...if you don't have somebody who is committed to 1) single-gendered schools, and 2) committed to high, high expectations, then it's not going to work" (Interview #1, 399-401). She also repeatedly stressed that the workload on a small campus can be much larger because everyone has to learn to wear "many, many hats. It's exhausting, but it's worth it, and we do it" (Interview #1, 234).

Teachers at Ford Academy not only teach multiple preps within a content area, there are some teachers on the campus who teach courses in multiple content areas. Teachers also are required to obtain Gifted and Talented certification, to work a week (or more) during the summer time, and conduct tutorials after school and on Saturdays.

School administrators are also required to give much of their time and energy to support the operations of the school. At Ford, there is one principal and one academic dean, yet the campus offers the programs and activities one might find at a much larger school. As a result, the administration's presence at evening activities and on weekends for school functions is very frequent. Additionally, there are many activities related to public relations and advisory council functions that engage the principal in activities that are held in addition to her day-to-day campus responsibilities.

**Sharon's view of the key factors.** As a district-level executive leader for Lonestar ISD during the implementation of Ford Academy, Sharon noted that there were several key factors that were crucial to the successful implementation of an all-female, single-sex campus: (1) Executive leadership support, (2) Support from the board of trustees, (3) Principal leadership, (4) Committed faculty and staff, (5) Commitment from district staff, (6) Coordination with district-level offices, and (7) Committed advisory council with strong community ties.

***Executive leadership support.*** Sharon believed that the number one factor in the successful implementation of Ford Academy was central office leadership support at the very top of the organization. She explained:

You have to have leadership at the top that is committed to the project and will devote the time, and I think that's what set ours apart. [In my position at the

time], the principal [at Ford Academy] reported directly to me and the other principals all reported indirectly to me, but we made that change early on because you have to clear the path for a special school to be special and to be successful. The superintendent needs to believe in the project...and support it” (Interview #2, 286-291).

She expressed that, since she retired, it has been more challenging for Violet because she now reports to the same person as the rest of the high schools, which is a lower-level executive position than the one Sharon held.

When I retired, I had to separate myself from the district. I said, ‘Let me talk to [Violet] when she needs me to talk to her.’ Because, I really coached [her] and helped [her] navigate the system... I’ve told her, ‘You’re doing the right thing, maybe it’s time you don’t need that anymore.’ (Interview #2, 555-561)

***Support from the board of trustees.*** Support from the Board of Trustees was mentioned multiple times by Sharon as a crucial factor for success. She added, “I give our board a lot of credit to take that risk because they could have said no, and they’ve gotten some push-back from the community, especially if someone’s daughter is not selected” (Interview #2, 292-294).

She explained not only did the initiative need political support from the board, but the campus and community appreciated symbolic support, as well. “There’s always a board member attending some function that they [Ford Academy] have, so they’re very supportive” (Interview #2, 316-317).



In addition to political and symbolic support from the Board of Trustees, Sharon mentioned that the board must be willing to support an initiative like Ford Academy with financial resources, and be willing to continue that support.

***Principal leadership.*** Another factor that Sharon mentioned numerous times was the leadership of the principal. Ford Academy had significant turnover in the principalship during its short existence. “[The] leadership of the principal is critical” (Interview #2, 320-321). Although she spoke of the positive traits of each of the principals at Ford, such as instructional coaching skills and ability to establish positive relationships with staff, Sharon stated Violet’s leadership was one of the main factors to the success at the campus.

She’s just brilliant...but she really is what college-prep means and she’s worked with those teachers about that, and she’ll go into the classrooms. If it’s not rigorous enough, she’ll talk to the teacher- and she actually sits in and works with the teachers and will personally try to help them, or she’ll have another teacher go in. (Interview #2, 373-379)

Sharon spoke frankly about the rigorous process that she and the superintendent went through when hiring Violet. She recalled:

What [the superintendent and I] realized is that standards of the school were not being upheld from the leadership of the school at the time and with some of the teachers. Dress had become sloppy. It had become ‘you don’t have to wear the full uniform, just dress a little bit so it kind of looks like a uniform.’ So, that’s one of the things that [the district] focused on when we found the next principal. We wanted someone who had extremely strong leadership to support those

expectations and standards, and who will not compromise those standards. I remember when [the superintendent] and I met with [Violet]...he could be very direct. He said, 'I need to know what I can expect from you as the leader of this school. What kind of standards can I expect from you?' I don't remember how she responded, but he said, 'Let me tell you, if you're selected as principal, I don't ever want to step foot in that school and see a young lady out of full dress code. I don't want [to see] hoodies [hooded sweatshirts]. If it's knee socks, then they're all going to wear knee socks. If it's black shoes, they're all going to wear black shoes.' And, [Violet] has upheld that...she has that in her, too. (Interview #2, 446-464)

Sharon commented that Violet's leadership had a tremendously positive impact on the overall structure and level of expectations at Ford.

"[Violet] and those teachers are really trying to teach the girls that, 'Yes, your friend that goes to [a different] school may act like that, but that's not okay for you. There's a different standard here [at Ford Academy]'. (Interview #2, 464-466)

***Selection of committed faculty and staff.*** According to Sharon, the selection process for a campus like Ford Academy must be set up to ensure that not only are the most qualified candidates selected, but that the teachers selected for the campus are also highly committed to putting in the hard work and taking on the extra responsibilities necessary to ensure success at Ford Academy. She added:

We had to have teachers who were totally committed to the concept...and their commitment to know that this was going to be hard and that there were high

expectations- you wouldn't be leaving at four every day; it's whatever it takes, that was the concept. We have a really good staff, a really good core staff. The main thing is we want people who are committed and who want to be there.

(Interview #2, 175-182)

Although she stated that the staff is incredibly strong, Sharon did add, "I wish we had a few more males [staff] over there" (Interview #2, 184).

In order to ensure that extremely committed candidates are hired, the selection process for teachers applying for teaching positions at Ford is also more involved than the traditional district process. According to Sharon:

The teachers go through a really rigorous interview process. Not only do they go through the interview process that any other teacher in our district would go through, they are also interviewed by students and they have to teach a lesson to the students and the girls critique the lesson and the teaching style as they're analyzing that candidate. [Violet] tells me that they're tougher than the teachers [on the interview panel]" (Interview #2, 185-189).

At the end of the interview, Sharon reiterated the importance of selecting committed staff members who have the right attitude, which is that they are willing to do "just whatever it takes" (Interview #2, 383).

***Commitment from district staff.*** Sharon explained that district staff commitment communication among the various offices and schools in the district was crucial.

"Making sure that the district staff at the cabinet level are committed to the success of the school [is essential]. This includes... support for technology, human resources, the

operation, and even the financial piece of it” (Interview #2, 321-323). She also commented that it was important to get the buy-in and commitment from other campuses.

We had to work hard with the principals – to get them to understand that we’re not trying to steal all the good little girls. We’re taking girls who are interested in a different kind of education...it took a couple of years for the principals to understand, and I think they’ve really supported it wholeheartedly. I don’t think it’s been a problem. It’s more about lack of communication and understanding that gets in the way of people supporting an idea or concept. So, we just had to work with them” (Interview #2, 129-136).

***Coordination with district-level offices.*** In Sharon’s opinion, coordination with district offices is a strong consideration during implementation. She recalled:

...often times, when I was trying to navigate this district, people didn’t have the same understanding of what the school was trying to create. Even though they [district-level offices] would respond, sometimes it was like pulling teeth to get things done, and I think if you already had that understanding and commitment to make sure the project was successful, that would be real important” (Interview #2, 661-665).

When asked about what she would change if she had it to do all over again, Sharon added:

I would have a district-level task force made up of representation from the major departments, like the Curriculum & Instruction, Finance...[Human Resources], Operations, Technology an advisory [council] member from maybe the foundation, but not necessarily, and maybe a teacher from the school, a parent,

and an administrator. [The district-level committee] would have to make sure that they're meeting at least twice a year, if not three times a year, to follow what's happening in the school so they can do some problem-solving. (Interview #2, 651-658)

***Committed advisory council with strong community ties.*** The other factor that Sharon viewed as instrumental to the success of the school was the commitment of the advisory council, especially the chair. Sharon added, “[She] was someone that I had known that was already in [the city] that had a strong background in fundraising and in very successful community projects” (Interview #2, 206-209). After introducing the advisory chair to the superintendent and having her approved by the LISD Board of Trustees, Sharon added:

She [the advisory chair] built her team and put together a team of some fantastic women who have all been very successful in business. They [the advisory council] are the diversity that represents the population of [our city] very well. These women are totally committed to this project and to seeing it through...they all do their part to bring in donors, to just market the school through their connections, and it has really brought a lot of positive press to the district (Interview #2, 225, 226, 233-237).

The Advisory Council for Ford Academy raised funds to help the school offer summer camps focused on math, science, and technology, provide horseback riding and tennis camps for students, fund research projects, and sponsor college trips. “The reason for the [Advisory Council]’s existence is to provide enhancements for these girls so that

when they enter college, as much as possible, they're on the same playing field as other girls" (Interview #2, 327-329).

In order to secure funding and support, Sharon stated that, "You have to have an advisory [council] that is very well-connected to the community and that's really good at marketing your district" (Interview #2, 336-338).

**Jenny's view of the key factors.** As a science teacher during the implementation of Ford Academy, Jenny stated that there were several key factors that were crucial to the successful implementation of an all-female, single-sex campus: (1) Committed faculty and staff, (2) High expectations, and (3) Principal leadership.

**Staff commitment.** Commitment emerged as a factor not only for administrators, but for teachers, as well. Jenny noted that the most important factor to the success at Ford was the buy-in and commitment of the campus staff. She explained:

Your staff needs to be on the same page and that's the difference I can tell between [Ford] and other schools. When I came to this school, it was 'This is how it is, and this is what we want,' and everyone has to buy-in to what we stand for or it doesn't work. (Interview #3, 53-55)

She commented that, throughout the years, there have been one or two teachers who were not completely committed to upholding the high expectations at Ford Academy and, "It was difficult for them" (Interview #3, 145).

Jenny also added that it was crucial to have teachers who were not only willing to uphold the high expectations of the campus, but who were also willing to put in the long hours and extra duties that came with working at Ford.

***High expectations.*** Closely linked to teacher buy-in is the setting and maintenance of high expectations for both students and staff. Jenny commented that the expectations for the campus were very clear. She remembered her transition to the campus and the administration setting the expectation. She explained it was clearly communicated that, “We WILL be tutoring. There WILL be homework. You WILL contact parents. You WILL work with students to make them successful. You’ll give them the homework and then you’ll give them support” (Interview #4, 53-58).

Jenny’s transition to the level of expectations at Ford was drastic, as she recalled. She commented that her adjusted expectations and the level at which she learned to present material have helped the students build the habits that will make them successful in college, a word they hear every day at Ford.

...For lack of a better word, I’d say I’m brainwashing them. They don’t know any different. They know they’re going to go to college and get through college. We don’t just talk about getting into college- anybody can get into college. We talk about getting THROUGH college. (Interview #3, 212-215)

***Principal leadership.*** Jenny stated that the staff buy-in and commitment were directly related to the leadership of the principal. She explained that teachers were more willing to create and maintain high standards with students as long as they knew they had the support of administration.

When I came to [Ford], I was coming from a different environment. So, very early on, I was called into the office and asked why I wasn’t giving much homework. I thought I was giving a lot [of homework], but I was not. Compared to my other school it was a lot, but it wasn’t enough for this school. So, that was

an adjustment for me. It was also an adjustment for me to have the support of administration...at my other school, if I gave homework and I only got 30% back, the question would have been, 'Why are you giving so much homework?'

Whereas, this was the flipside. 'Why aren't you giving homework? And, if you're giving it and it's not coming back, then who are those students so we can talk to them.' ...if I had issues, the administration backed me up right away.

(Interview #3, 62-72)

Jenny clearly believed that the primary reason that campus expectations were so high and that teachers clearly supported those expectations was because the principal enforced those expectations and supported teachers in the event that a parent or student questioned the rigorous standards.

**Dana's view of the key factors.** As a math teacher during the implementation of Ford Academy, Dana stated that there were several key factors that were crucial to the successful implementation of an all-female, single-sex campus: (1) Principal leadership, (2) Focus on college preparation, (3) Selection of motivated students, (4) Committed faculty and staff, and (5) High expectations.

***Principal leadership.*** Dana stated that the most important factor in the implementation of a single-sex school is the leadership of the principal. She clearly felt this position required someone who fully supported and believed in the merits of single-sex education. She noted, "You have to have leadership with a 100% belief in the idea, and if they're not 100% on-board and haven't read the research and don't know the importance of it, and they don't get it, no one else will" (Interview #4, 164-170). She admitted that she has not always been aware of the commitment from the district, but



shared that even though Ford Academy has had multiple principals, each of them was very committed to student success and single-gendered education.

Dana also noted that principal leadership was key to ensuring one of her other factors, high expectations. To demonstrate this point, she recalled an instance early on when a teacher's iPhone was stolen.

She [the principal] locked down the whole school. Never had anything stolen since, except maybe a marker, but nothing big. So, I think that was a very important part of it. It was those very, very clear, high expectations. And if you make the choice not to [follow them], there are consequences. (Interview #4, 249-350, 352-354)

***Focus on college preparation.*** Although she commented that the campus has tried to focus on other goals, Dana explained that the campus' focus on preparing students for college was a crucial factor in their success.

[College preparation] has to be a focus...I've seen us kind of play with things and the college prep focus fits best because you're not saying, 'Okay, I only want girls who are interested in math and science, or I only want girls who are interested in fine arts...' You're looking at, 'I'm interested in females who are interested in and 100% committed to going to a four-year university.' (Interview #4, 176-181)

She added that the training teachers received prior to the opening of the school, and every year since, has been very helpful. She noted that teachers attended the AVID Summer Institute, Pre-AP Summer Institute, and Laying the Foundations, which are all professional development related to college-readiness. When asked which she believed was most useful, Dana added, "I love Laying the Foundations. I use the lessons. I love

the lessons...because of the fact that I'm teaching AP Statistics and AP Calculus next year, and I can see the connection" (Interview #4, 257-261).

***Selection of motivated students.*** Dana explained that choosing students who are motivated above students who have demonstrated academic achievement should be the primary focus of the student selection process. She expressed frustration at sentiments in the community regarding their selection processes.

There's always this misconception that you need the brightest kid, but you don't need the brightest kid...it's the kid that wants it the most, that's willing to work, and do the work, and come to tutoring, and ask questions, and do all that. Those are the kids that get the most out of this. (Interview #4, 190-194)

In her opinion, the student selection process at Ford Academy has a strong focus on recognizing enthusiasm and drive, rather than selecting students who have performed well on previous campuses. She added, "[It doesn't work] when you start pinpointing and picking out the brightest kid- we've never done that. And I think *that's* what's created success - because our kids work really, really, really hard for us" (Interview #4, 198-200).

***Committed faculty and staff.*** In addition to student selection, Dana shared that having the 'right' teachers on staff was crucial to the successful implementation of a campus like Ford. When asked what makes a teacher right, she replied:

Passion. Just sheer passion for education, and sheer passion for their subject matter. They have to truly believe in single-gender education...100% believe in it. Because, I've seen teachers that have come and gone, and they're like, 'I don't really understand this whole thing' and 'Are they not going to have a prom?' and

‘How are they going to interact with boys?’ They don’t stay here because they don’t get it. They don’t get the whole, big picture. I want to say, ‘Trust me. They’re going to be fine.’ (Interview #4, 202-208)

Dana’s definition of committed staff referred to teachers that were dedicated to single-sex education as a practice. She reminisced about how she came to be a teacher at Ford Academy and described the type of passion needed to be successful:

...I saw the school when I came to [the city], I was like, ‘I have to work there, I just have to work there, I just HAVE to work there.’ ...I basically begged the principal for my job. I said, ‘You don’t understand how strongly I feel about this.’ (Interview #4, 232-234, 237-238)

***High expectations.*** Setting and upholding high expectations was also an important factor for Dana. She noted that in order for a campus like Ford to be successful, expectations needed to be clear, as well as the consequences for not meeting those expectations. She explained, “You can break the rules and these are the consequences, and there is really no wavering. There are clear and high expectations and, if you don’t meet them, then you’re going to get in trouble” (Interview #4, 335-337.)

Dana also explained how expectations are upheld in her classroom, as well. She makes sure that students understand that it is a choice not to follow a rule and that, in life, there are consequences for the choice not to meet established expectations. “I don’t let kids into my room out of uniform...you woke up this morning and you chose to put that on your body. They get the point after a while” (Interview #4, 337-339-340).

Dana strongly believed that the first year was crucial for establishing those high expectations. Although she explained that many students viewed the high standards as

the staff being ‘mean’ in the beginning, she added, “But, then, we don’t have any discipline problems [now]...my biggest discipline problem in a day is talking” (Interview #4, 342-342).

**Heather’s view of the key factors.** As a science teacher during the implementation of Ford Academy, Heather stated that there were several key factors that were crucial to the successful implementation of an all-female, single-sex campus: (1) Principal leadership, (2) Clear campus mission, (3) Committed faculty and staff, and (4) Parent commitment.

***Principal leadership.*** Although Heather did not initially list principal leadership as one of the key factors for implementation of a campus like Ford, she concluded the interview by stating that principal leadership was the most important factor in ensuring that the other factors (clear campus mission, committed faculty and staff, and parent commitment) existed.

I think it all comes down to the leadership of the principal. If you don’t have [that]- and I transitioned from one principal to a new principal, and both are very good leaders- I can just see, if we didn’t have a good leader at this school, I could just see how very easily we would just be a regular school that has all girls in it. (Interview #5, 143-146)

Not only did Heather feel the principal was crucial to maintaining high standards for teachers and students, she also shared that the principal must provide opportunities for teachers to grow and to attend trainings.

That is the key. You’ve got to have a good leader. If you don’t have a leader with very high expectations, I think it becomes very difficult for the school to

survive, [and] to be at the high performing level that we've had. (Interview #5, 160-162)

***Clear campus mission.*** In addition to principal leadership, Heather stated that a key factor to successful implementation of the Ford Academy was a having very clear campus mission. She shared that not only should the stakeholders within the school have the same understanding of the campus mission, but that it should be made clear to the district, and to external stakeholders, as well.

She explained that the professional development opportunities that staff received truly reflected the campus mission of establishing a college preparatory environment for students.

The principal at that time made sure we...went to Laying the Foundations, which is a pre-AP professional development, and that gave me the focus of where I needed to have my kids, [be]cause it's at that rigorous, higher level. That was very good training. Also, we went to the AVID Institute... We did those two, weeklong trainings back-to-back. The AVID [training showed me] a completely different look at how to support the students, and content, and study skills, and journaling in the classroom, and what that looks like in the science classroom. And, just providing that support. That was a very good training to go to.

(Interview #5, 54-62)

Heather also noted that both student and teacher selection processes should reflect the campus mission, in this case, high expectations and college preparation.

***Committed faculty and staff.*** Heather felt strongly that having a committed faculty and staff were important to the campus. She shared that one of the benefits of the

staff selection when Ford opened was teachers in the district were not ‘placed’ there and the principal was able to interview and select teachers based on their qualifications and commitment to the program.

She also stated it was very important to clearly communicate the expectations of the school and the additional responsibilities during the hiring process.

That’s very important, [that] during the hiring process that they’re finding people that know the expectations of the school and that it’s different than being at a regular school... That there are a lot more commitments, there’s a lot of after school activities that you have to be a part of if you want to make the school successful... and, especially starting out with a small school, the teachers need to understand that you’re going to have different roles. Like, I taught social studies AND science, I was the GT coordinator, I coached cross-country [track]. I organized the Equestrian Club, first with a foundation grant and now with a grant through the local rodeo. I sponsor the club and take 20 girls to a lesson once a week. So, you have to make sure they’re finding people that are passionate about what they do and they really want the school to be successful. (Interview #5, 26-36)

***Parent commitment.*** Parent commitment had two meanings for Heather. She described that the school needs parents to be actively involved in events and that parents must commit to that idea. She also explained that parent commitment entails understanding that the school may be challenging for their daughter. As a result, the school needed the parent’s commitment to uphold the same expectations, to support the students, and to put the extra effort in that may be needed to ensure student success, such

as ensuring students attend tutorials. She added, “I know it’s going to be tough. It’s a rigorous curriculum. But, they [the students] can do it as long as they are given parent support” (Interview #5, 42-43).

**Victoria’s view of the key factors.** As an English and social studies teacher during the implementation of Ford Academy, Victoria stated that there were several key factors that were crucial to the successful implementation of an all-female, single-sex campus: (1) Committed faculty and staff, (2) Pre-implementation curriculum planning, (3) District support, and (4) Principal leadership.

***Committed faculty and staff.*** A committed faculty and staff was a non-negotiable for success, according to Victoria. She noted that it was important to hire people who were willing to put in the extra work required for success. “You cannot have anybody on that team that talks a good game, but doesn’t come through” (Interview #6, 87-88).

Victoria explained that the necessity for commitment extended past the teachers, to every person on the staff.

...we had a team of extremely like-minded and work-minded [individuals] all on the same page, and I think that was the core factor...and it wasn’t just the teaching staff, it was every single person working at the school who made the commitment to do what needed to be done to make it work. (Interview #6, 94-97)

***Pre-implementation curriculum planning.*** Victoria stated that another factor that would aid the successful implementation of a school like Ford Academy would be time to do curriculum development before opening the campus. She felt like it would have been helpful to do the curriculum work in the summer, rather than throughout the year.

I do believe that writing curriculum on the fly and while you're in the middle of teaching is not necessarily the best route to go. It's very stressful, but we had a core structure of curriculum before we came in and amended it as we went.

(Interview #6, 98-102)

She noted that having a more structured curriculum that suited the needs of the campus in place would have been helpful. She commented that the curriculum needed modifications in order to developmentally appropriate and to be written in such a way that it ensured that teachers were doing cross-curricular lessons.

***District support.*** When speaking about factors necessary to the successful implementation of a campus like Ford, Victoria stated that the campus would have been even more successful had they felt greater support from the rest of the district. When asked to elaborate, she said, "I mean, when it's just the superintendent and [Sharon] that are vouching for your success, it makes it really hard" (Interview #6, 133-134). Victoria shared that the campus implementation was made much more difficult by the hostility the staff felt from other teachers in the district and by a misunderstanding of the students.

There were a lot of people in the district that were not really rooting for the school. There are still people in the district who are not rooting for the school...we had animosity from the teachers and staff that got kicked out of [this building]...It wasn't any of our doing, but it made it really difficult when you would go to trainings... There needs to be a better sense of integration and acceptance by the district itself... We still have issues with our peers at other schools. 'Oh, you work at that school where everybody's always super-smart.' I'm like, no, they're regular kids, just like at your school. They have no idea what



our process is to get into the school. They have no idea what student body we have. And, it's been difficult. (Interview #6, 130-131, 136-137, 139-145)

***Principal leadership.*** Victoria spoke very passionately about the importance of having strong principal leadership. When asked about the type of leader that is needed for a campus like Ford to be successful, Victoria replied, "That's a loaded question because I've had two now here" (Interview #6, 173). She began to describe the positive traits that each principal possessed, though she did not name names. She commented that one of the principals at Ford was a great motivator, mentor, and coach. She stated that the other principal was very good at setting high expectations and running an efficient program. She noted that, "You need both" (Interview #6, 598).

She explained that a campus like Ford needs a principal who supports teachers and encourages innovation.

Because we take risks here. There's a tremendous [apprehension] and this is one thing we *have* to encourage our students to do. But, if our students don't see us take risks, then how can we legitimately encourage them to take risks? And, if you take risks...sometimes they don't pay off...and I think [penalties are] bad because not everything's going to work right the first time. (Interview #6, 197-202)

Victoria also shared that in an environment that has so many demands placed on teachers, it is important to have an administrator that focuses on morale and culture.

[An effective principal should focus on] cultivating a good culture, cultivating teacher's careers, cultivating ego, which there's a lot of ego. I don't know how many of these [teachers] you interviewed on our staff, but there's a lot of type A

[personalities] and a lot of strong ego here. If you don't cultivate that, it's going to go somewhere else and find some place that will. Not a lot of weak characters make it here. (Interview #6, 600-604)

**Participant Perceptions: Key Factors for the Successful Implementation of an All-Female, Single-Sex Campus**

Violet – Campus Principal

- Common understandings throughout the district
- Support from the board of trustees
- Committed advisory council with strong community ties
- Coordination with district-level offices
- Committed faculty and staff

Sharon – District-Level Executive Leader

- Executive leadership support
- Support from the board of trustees
- Principal leadership
- Selection of committed faculty and staff
- Commitment from district staff
- Coordination with district-level offices
- Committed advisory council with strong community ties

Jenny – Science Teacher

- Committed faculty and staff
- High expectations
- Principal leadership

Dana – Math Teacher

- Principal leadership
- College prep focus
- Selection of motivated students
- Committed faculty and staff
- High expectations

Heather – Science Teacher

- Principal leadership
- Clear campus mission
- Committed faculty and staff
- Parent commitment

Victoria – English and Social Studies Teacher

- Committed faculty and staff
- Pre-implementation curriculum planning
- District support
- Principal leadership

**Figure 6: Participant Perceptions: Key Factors in the Successful Implementation of an All-Female, Single-Sex Campus**

**Question #2: What are stakeholder perceptions of the successes experienced during the implementation of an all-female, single-sex, whole-school reform?**

After identifying what they perceived to be the key factors for successful implementation, each of the participants was asked to identify the successes they felt had been experienced during the implementation of an all-female, single-sex campus. Again, participants were not provided any specific examples, although the researcher did ask for clarification, when needed. Except when noted, all responses are listed by the order in which the participants communicated them.

**Violet's view of the successes.** As the principal at Ford Academy, Violet stated the greatest successes experienced during the implementation of the Ford Academy for Young Women include: (1) Parent involvement, (2) Building a campus culture of high expectations, and (3) Student character development.

***Parent involvement.*** Violet commented on the level of involvement at Ford and how strong it has grown. She noted that it was a vital element in the success of the school and has worked to ensure that parents are aware of their importance, beginning with the interview process for student selection. There is also a parent community service component that is a condition of the student's attendance at Ford.

We have a parental [involvement] requirement...this year, we started with a parent passport. The parent passport keeps track of if a parent goes to a [parent] meeting, they just have to get it signed and they get credit for it. They have to get ten per year. It helps us get that parent involvement where we need it. (Interview #1, 259-265, 268-271)

The expectations for parents at Ford Academy are very high. As a part of their Title I Parent Compact, parents are required to complete ten hours of community service with the campus. Students whose parents do not fulfill this requirement by the end of the year are placed on probation with the campus. Although the campus prefers that parents provide the ten hours of community service on the campus, they also allow parents to pay \$10 per hour for any hours they cannot serve. Violet explained that, although the requirements are high, parents do not mind and are willing to participate. She commented that the more involved the parents are, the more they are able to buy in to the high expectations the campus has for their daughters.

***Building a campus culture of high expectations.*** Without a doubt, the expectations for students are very high at Ford Academy, not only because of the FEYW model, but also because of the district commitment to building the culture for that campus. Violet explained the campus commitment to high expectations was one of their greatest accomplishments. She added, “We have very high expectations for our girls. I think the vision was great that we have 100% of our girls accepted to college. I think those standards have been maintained” (Interview #1, 271-273).

***Student character development.*** Violet seemed most proud of the positive campus culture devoted to student character development that is found at Ford. “It’s about building that sisterhood,” she added (Interview #1, 328).

We tell them it will do us no good and we will do no justice....if we have the smartest kids but their character is not what it needs to be in order to be successful and go out into this world and be productive citizens in our community.

(Interview #1, 345-347)

Violet relayed an example that she felt truly summed up the campus culture and emphasis on character. She said:

For example, the other day, I was meeting with someone from the district and....one of my sixth graders walked in with an iPhone and said, ‘Somebody left this in the restroom.’ She [the district administrator] commented and said, ‘I would have never believed that if I hadn’t seen it with my own eyes.’ I said, ‘What are you talking about?’ She said, ‘That they [the students] turn in an iPhone.’ I said, ‘That’s what we nurture here.’ We tell them sisters don’t steal from each other, sisters don’t hurt each other...it’s a culture that we cultivate here. (Interview #1, 348-356)

**Sharon’s view of the successes.** As the district-level executive leader, Sharon stated the greatest successes experienced during the implementation of the Ford Academy for Young Women include: (1) Student achievement and development, (2) Team of stakeholders, and (3) Point of pride for the district.

***Student achievement and development.*** Sharon noted that the greatest successes in the implementation of Ford Academy are the girls in the school. She reflected on the annual induction, called the White Rose ceremony, adding:

They’re fifth graders coming in – they’re elementary girls, and they’re so nervous...they’re dressed up, their parents are there and they have flowers, and some have their whole family. When they walk across that stage and get that white rose- *forever* their life is changed. That is a pivotal moment and they probably don’t realize it yet. (Interview #2, 621-628)

She reflected on how the students evolve from young girls, from being too shy to look you in the eye, to confident young ladies, poised and outgoing. “The things that they [the students] have accomplished – that’s our greatest success” (Interview #2, 630-631).

***Team of stakeholders.*** Sharon shared that another success that resulted from the implementation of Ford Academy was the creation of a strong team of stakeholders. “The team between the principal, the school district, the advisory [council], and the foundation; there’s synergy there” (Interview #2, 632-633). Although this has been a growing process, Sharon added that the groups come together, support one another, and work through issues. “It’s just so exciting to see what this team has done together” (Interview #2, 635-636).

***Point of pride for the district.*** Sharon stated the third greatest accomplishment of the implementation of Ford Academy is that it:

...shed great light on our district. [Ford Academy] has really been a star and I think there’s a perception that [the district] will never rise to the level that the city want[ed] it to. Definitely this school and other schools in the district- there are a lot of other high-performing schools- have shown that it is possible. (Interview #2, 640-644)

She added that commitment and hard work were the only things that distinguish the high-performing schools from the rest. In her last year with the district, Sharon even encouraged other principals to create advisory councils of their own to help create the same energy for other schools in the district.

**Jenny's view of the successes.** When asked about the successes experienced during the implementation of Ford Academy, Jenny stated that they were (1) Committed staff, and (2) Safe, nurturing campus culture.

***Committed staff.*** Jenny felt strongly that the staff at Ford was extremely committed to student success and that, in and of itself, was a success. She commented that there is a misconception outside of the campus that the work is easy because the girls are motivated. She explained:

It's hard work. It's very demanding...it's demanding because 1) the girls are smart, they know their stuff, so you need to know your stuff. You can't fake it, and 2) the homework. It took me the whole first semester to adjust to the [amount of] homework. I didn't see my family because it was so much. (Interview #3, 150-154)

Jenny noted that she was not alone and that all of the teachers were willing to stay after hours and put in the work. "If you get a group of teachers who are willing to do that, then you are going to be successful" (Interview #3, 155).

***Safe, nurturing campus culture.*** Sisterhood is a term that was frequently used at Ford. Jenny believed that was one of their greatest successes. She explained:

...we built up a sisterhood. We call the girls sisters...and we try to encourage the girls to encourage one another. You can't really get rid of 'girls are girls'...but we try to encourage them to help each other, to not tear each other down because women are known to do that. (Interview #3, 156-159)



Jenny went on to list the many ways that the campus focused on building the girls' self-esteem and character. She shared that one of the ways the teachers connected with students is through what is called "prep" class. She described the class by saying:

In the first year, it was set up for the teachers [as] this is your group of students, you need to watch over them, take care of them. If there's something going on, you're the go-between...I refer to myself as their 'Prep Mom'...on the holidays, I do something special for them, that kind of stuff. And that's the class where I talk to them about behavior and things like that. And, we have a big sister, little sister. The ninth graders get little sisters and once a month we meet during [the prep period] and have an activity for them. (Interview #3, 168-180)

Students also complete community service hours together during this class by collecting goods for donations at Thanksgiving and Christmas.

**Dana's view of the successes.** When asked about the successes experienced during the implementation of Ford Academy, Dana stated that they were (1) Safe, nurturing campus culture, and (2) Campus pride.

***Safe, nurturing campus culture.*** Dana commented that the campus was very successful at establishing a sense of sisterhood and a feeling of family at Ford Academy. She added:

I think [one thing we did] really well [was] establishing a family. The sense of family throughout the school, and a sense of sisterhood. And a sense of belonging, and a sense of pride in wearing that plaid skirt... (Interview #4, 360-362)

*Campus pride.* Along with a sense of sisterhood, Dana explained that the campus and students have worked very hard to build a sense of pride at Ford. She definitely felt that this pride was not established easily.

[The girls were] made fun of on the bus. They ride the other magnet bus, and those first two years were really bad for those kids. They were the only ones in plaid and they got called dykes. They got called every other imaginable thing they could possibly call them. They were made fun of every day. They were made fun of at the bus stop. They were made fun of on the bus. And, to think you have these kids who are going through all of that on the way to school and then know that at 3:35, they have to get back on that bus. (Interview #4, 362-369)

Dana noted that, although that was very challenging for students, there were some wonderful learning experiences and opportunities for growth as a result of those challenges.

I think that maybe, when I look back, it definitely had to build character [in those girls] because they definitely had to learn how to respond, but not respond the way they were being spoken to. I remember having conversation, after conversation, after conversation with the girls to just say 'Thank you' and to stand there, no matter how hard it is...these are the kids they went to school with last year and now they're terrorizing them. (Interview #4, 386-392)

One of the coping strategies that Dana taught her students is to focus on their futures and where this campus was taking them.

I said, all you have to do is, in your mind but do not say it, 'I'm going to the best university. I'm going to go to one of the best universities.' You have to tell

yourself that over and over and over and over again, but don't be ugly, because it's very easy to be. (Interview #4, 393-396)

Over time, Dana realized that the students began to find pride in being a student at Ford Academy.

What they did, I noticed..., is they started associating [themselves] with the local private schools. They started thinking along those lines, that this is a prestigious thing. And now, the sixth graders are so funny because they'll say, 'I sleep in my skirt,' or they'll wear their uniform on some Saturdays so that people will ask them where they go to school. (Interview #4, 401-405)

Dana also noted that the same young ladies who were teased on the bus for wearing the uniform skirt are now proud to wear it.

They're so proud of their school, and they're the ones who actually went through this, and they wear their skirts every day now. They only have to wear them on Monday, but you see them and they always have on their plaid. (Interview #4, 373-376)

Dana remarked that she is able to see the pride in the community and even with her own daughter.

We've built an amazing amount of pride. My daughter was selling chocolate in the neighborhood yesterday and she came home and said, 'Mom, so many people asked me about our school and I was so excited to tell them about it.' Or, someone will say, 'Oh, I saw you on the news,' or something like that. So, that's one clear thing [we did very well]...establishing pride. (Interview #4, 407-412)

**Heather's view of the successes.** When asked about the successes experienced during the implementation of Ford Academy, Heather stated that they were: (1) Parent and community involvement, and (2) Student development.

***Parent and community involvement.*** Heather spoke about the strategies that the campus used to increase parent and community involvement, particularly within the science department. Each year, the campus hosts a science fair, involving the community and parents in a day-long event that takes place on a Saturday.

That's one of the dates when we have the most parent involvement because parents come and serve breakfast to our judges. We involve the PTA. The PTA provides breakfast and lunch for the judges, they provide lunch for the students...parents come and help monitor the hallways and classrooms, so it's a pretty big event. That whole process is something we've really honed in on and try to improve each year, getting the community involved and recruiting different agencies that bring in universities that come in and judge. So, we're [focused on] bringing that community in, too, that support, and [ensuring] that they see what the school is doing. (Interview #5, 104-114)

***Student achievement and development.*** Heather also believed that the campus did a very good job at focusing on the development of leadership skills and confidence in students. She added that they tried particularly hard to do that within the science department. "We try to build confidence in our classrooms by doing presentations...focusing on group work, presentations, working together in labs. They're always interacting with one another" (Interview #5, 118-121).

**Victoria's view of the successes.** When asked about the successes experienced during the implementation of Ford Academy, Victoria stated that they were: (1) Safe, nurturing campus culture, and (2) Student achievement and development.

***Safe, nurturing campus culture.*** Creating a safe, nurturing environment for girls is one of the greatest successes at Ford Academy, according to Victoria, who also looked at it from the perspective of a parent.

[We]'ve created a very safe, nurturing culture that promotes...I don't know how I want to put it...that promotes an environment where a girl can be a girl, and she doesn't have to be a pseudo-woman. The first year we were open, I'll never forget this, we had seventh grade girls who were 12 and 13 years old. They were playing Barbie, and I had come from a regular middle school, and they would never do that. (Interview #6, 224-229)

When asked to elaborate on the merits of the single-sex environment, Victoria noted that the model was very strong for middle school girls, but as a parent, she had concerns about whether or not high school students are prepared for life after high school.

Middle school [years are] transition years...going from a single classroom environment to rotating classrooms. So, those sixth, seventh, and eighth grade years are vital to instilling the discipline that you need to have multiple courses in different places and getting yourself there and being able to please six, seven, [or] eight teachers. So, if you teach [students] those skills in a safer environment, and I do believe the single-gender environment is a safer environment...they acclimate better... In terms of high school, single-gender versus co-ed, that's tough. Because, I love that my daughter can come here and she doesn't have to

worry about how she looks and she doesn't have to worry about getting hit on, or somebody squeezing her butt in the hallway, or things of that nature. But, at the same time, she's 16 years old...and I'm terrified as to her socialization with regards to men because she hasn't had any and she's going to go off to college. So, we're very open and have a lot of conversations, but at the same time, would she have done better or fared better in life if she had been in a co-ed environment? As a parent, I'm in that quandary...but, even as a teacher, I see it, so I don't know. (Interview #6, 368-385)

Although, Victoria was uncertain about whether the single-sex environment is the best for high school girls, she believed that students have the ability to learn to make better choices. "If they're in a single-gender environment, they tend to [experiment] less because they are not exposed to [boys/sex] and that allows them to grow up a little more...and I think they make better choices" (Interview #6, 361-365).

***Student achievement and development.*** Victoria also believed that Ford Academy has been incredibly successful due to the success of students.

I think we've proven that you can take neighborhood kids and make them successful, and it doesn't require millions and millions and millions of dollars. It requires money, not an incredible amount of extra money, and these are just kids. They're not all Gifted and Talented students; these are neighborhood kids. They come from poor backgrounds with very little exposure. And, ANY school can do this, but it really does take a good time- a team that wants to do it. (Interview #6, 235-241)

Victoria stated that many aspects of the campus have led to student success, including the learning environment, the way teachers have bonded with and mentored students, and the level of dedication and hard work put forth by the teachers.

<b>Participant Perceptions: Successes Experienced During the Implementation of an All-Female, Single-Sex Campus</b>	
<u>Violet – Campus Principal</u>	<ul style="list-style-type: none"><li>• Parental involvement</li><li>• Campus culture of high expectations</li><li>• Student character development</li></ul>
<u>Sharon – District-Level Executive Leader</u>	<ul style="list-style-type: none"><li>• Student achievement and development</li><li>• Team of stakeholders</li><li>• Point of pride for the district</li></ul>
<u>Jenny – Science Teacher</u>	<ul style="list-style-type: none"><li>• Committed staff</li><li>• Safe, nurturing campus culture</li></ul>
<u>Dana – Math Teacher</u>	<ul style="list-style-type: none"><li>• Safe, nurturing campus culture</li><li>• Campus pride</li></ul>
<u>Heather – Science Teacher</u>	<ul style="list-style-type: none"><li>• Parent and community involvement</li><li>• Student achievement and development</li></ul>
<u>Victoria – English and Social Studies Teacher</u>	<ul style="list-style-type: none"><li>• Safe, nurturing campus culture</li><li>• Student achievement and development</li></ul>

**Figure 7: Participant Perceptions: Successes Experienced During the Implementation of an All-Female, Single-Sex Campus**

**Question #3: What are stakeholder perceptions of the challenges to the successful implementation of an all-female, single-sex, whole-school reform?**

Finally, after identifying what they believed were the successes experienced during the implementation, each of the participants was asked to describe their view of the challenges they experienced during the implementation of an all-female, single-sex campus. Again, participants were not provided any specific examples, although the researcher did ask for clarification, when needed. Except when noted, all responses are listed by the order in which the participants communicated them.

**Violet's view of the challenges.** As the principal, Violet stated that the challenges of implementing an all-female, single sex campus were: (1) Planning for sustainability of resources, and (2) Hiring the right staff members.

*Planning for sustainability of resources.* Although there was grant money provided by the foundation, Violet shared that planning for sustainability was essential. She added, "I would caution [anyone considering this model] to be very strategic about what they're spending their money on...it's about planning; there has to be some forethought into that. Then, get with an advisory board that can help you raise those monies [that you need]" (Interview #1, 360, 374-374).

Violet added that the leader of a campus must have a clear vision of the priorities when determining how funds will be spent.

In other words, my focus here has been allotting money for college visits, versus buying a tote bag for students. You really have to think about what your priority and focus is going to be on [funds] that are donated to your school. (Interview #1, 361-363)



***Hiring the right staff members.*** Violet felt strongly that one of the biggest challenges at a campus like Ford is finding and hiring the right staff members. She noted the amount of commitment that any teacher working on this campus would have to have and that teachers have many other duties, such as coaching, club sponsorship, tutorials, and Saturday school. “It is a very small campus, so staffing here is a little different...people wear many hats” (Interview #1, 237-238). Additionally, Violet spoke about the challenges of creating a master schedule that meets the needs of students while working within the confines of a small staff. She felt like the best strategy to meet the staffing challenge is to recruit and hire teachers with “composite or multiple certifications so that you’re not hiring great teachers that are locked into sixth or eighth grade, [otherwise] you’re going to have problems when it comes to your master schedule. That was a challenge initially” (Interview #1, 386-388).

***Sharon’s view of the challenges.*** From her role as the district-level executive overseeing Ford Academy, Sharon stated that the challenges of implementing an all-female, single sex campus were: (1) Planning for the sustainability of resources, (2) Selecting a principal, (3) Handling media scrutiny, (4) Anticipating student attrition, (5) Pre-implementation planning, (6) Addressing variability within district systems, and (7) Moderating political challenges.

***Planning for the sustainability of resources.*** As Sharon noted, the FEYW provided one million dollars over four years of grant funding, but that there were still significant resources required to open and operate a school like Ford. A district must also plan for the long-term needs of the campus. “Financially, [at the] district-level, you need

to think through what it's going to cost to create a school like that. We found the resources to do it, but sometimes it was hard. You have to know, 'Is there commitment from the board that if we open this school [to fund] what this is going to cost us?'" (Interview #2, 679-682).

***Selecting a principal.*** Sharon emphasized the importance of hiring the right principal. When asked about her advice to other district-level executive leaders considering the implementation of an all-female, single-sex campus, she said, "I think [you must] be extremely selective in a principal and making sure you have someone who has the same high standards that you want for the school. Sometimes you can look for one component in what you want in that leader and completely miss the other important components" (Interview #2, 676-679).

***Handling media scrutiny.*** Sharon agreed that Ford Academy experienced more intense media scrutiny than other schools in the district.

So, that's something to be prepared for...for the most part, the media has been very supportive of it [Ford Academy], but when something [negative] happened...I think you just have to realize that you're in a bubble. And this school is always going to be in a bubble and everyone's going to be looking in because people want to poke holes at why it won't work or what's wrong with it. (Interview #2, 425-430)

***Anticipating student attrition.*** Sharon spoke frankly about some of the unexpected challenges Ford Academy has faced. "Another challenge of implementation is knowing that you're going to experience attrition, and it's not going to be pretty. I just didn't realize it was going to be as drastic as it has been" (Interview #2, 486-488). She

added that they lost the majority of their students in the first two cohorts in the transition from middle school to high school. The reasons for students leaving varied from wanting to play specific sports to academics to wanting to experience a comprehensive high school with mixed genders.

When asked if perhaps this is a better model for middle school than high school students, Sharon did not think that was the case. She shared that focusing on college prep and relaying that to parents and students was important. “I think it’s paying more attention to it upfront. Now, we pay more attention to it than we did” (Interview #2, 505-506).

***Pre-implementation planning.*** Although there was support from the foundation during pre-implementation planning, Sharon commented that there were a lot of issues that could have been avoided had they been thought of, but that there wasn’t much of a guide to help them anticipate problems. She added:

When you’re growing something, you’re building something as you go. There are so many dynamics that are coming at you that you may not even realize are there. I don’t think we thought through all of things because we didn’t even know to think them through. (Interview #2, 508-510)

***Addressing variability within district systems.*** Sharon noted that the implementation of Ford Academy was eye-opening in many respects by shedding light on hidden issues within the school district.

You learn a lot about your system. You learn what works and what does not work. You learn where there are gaps and where things are broken. That has

been an unintended, [but] very positive consequence of this project. (Interview #2, 513-515)

Even though Ford Academy students came from all over the district, Lonestar ISD realized that the students were very weak in their basic academics. At the same time Ford Academy was opening, LISD conducted a curriculum audit and recognized gaps in the curriculum. As a result, the district rewrote the curriculum during the second year of Ford Academy's implementation. "You think everyone is being educated at the same level, but you find out they're not at all" (Interview #2, 537-538).

The district also recognized areas of need in the counseling department, transportation, and technology. "So, we recognized a lack of systems, and because I was so involved in it, that helped because all of the instructional departments reported to me" (Interview 525-527).

***Moderating political challenges in the community.*** Although the district took many steps to work with the community, Sharon explained that there were political challenges, particularly in the beginning.

The first White Rose ceremony was so sad, yet our girls did so great. Parents and children of the schools that were closing boycotted the induction ceremony and came in with signs, and as we started going through the induction ceremony, they started screaming and yelling out, 'You took our school!' And here are these families and their little girls in the middle of the White Rose ceremony. We just went right on and didn't miss a beat. (Interview #2, 703-707)

Sharon also remarked about the political growing pains with parents who took issue with the very high standards at Ford Academy.

I've stood up in front of parents and said before, 'This is a special opportunity to come to this school, a special privilege.' ...and one parent said, 'But, it's so hard and my daughter has homework.' I said, 'Yes, it is and we never promised you it would be easy. What we promised you was that if your daughter comes [to Ford Academy], maintains her grades, [has] no discipline [issues] and good attendance, we will do everything we can to find a college that will accept [her]. That's what we promised you and that's what we're going to continue to work towards. But, you have a choice. There are many other schools in this district.' [The parent said], 'Are you telling me to go to another school?' [I said], 'I'm telling you that you have a choice. And, I'm telling you that if your daughter stays at [Ford Academy], we are not changing our expectations.' (Interview #2, 730-740)

**Jenny's view of the challenges.** Jenny saw the challenges of implementing an all-female, single sex campus as: (1) Hiring the right staff members, and (2) Creating a unified staff committed to the campus vision.

***Hiring the right staff members.*** Jenny noted that selecting the right staff members could be a challenge because she felt people say what they need to say in an interview if they want the job. "People will say and present themselves one way and be a totally different way...but, if [you figure that out after] you already have that staff member, that could be a challenge" (Interview #3, 192-193).

When asked what the crucial goal in hiring should be, Jenny answered:

Making sure your teachers see the very best in every single kid and that they expect the best from every single kid. It doesn't matter what their background [is]. It doesn't matter as long as [the teachers] are willing. I think it might be a

challenge getting staff members that are going to do that because it takes a lot of work. (Interview #3, 203-207)

Jenny added, with tears welling up in her eyes:

I go home tired a lot, but it's worth it. I can't wait for these girls to get out and get through college because in my mind, they can do such great things that...[pause] I can't believe I'm a part of it. (Interview #3, 207-209)

***Creating a unified staff committed to the campus vision.*** Jenny continued to stress the importance of having a unified staff committed to the vision of the campus. She described her experience at a different campus where only some of the teachers were really pushing students. "My students performed for me, and they performed for the other teachers [who were pushing them], but we were always swimming in the opposite direction from the other teachers" (Interview #3, 235-237).

When asked how to create a unified staff committed to the campus vision, Jenny felt strongly that the leadership of the principal is key. She commented that a principal should be strong enough to deal with ineffective staff one on one. "I don't like when principals call a meeting with the entire staff if only two or three teachers were doing something wrong" (Interview #3, 245-247). She recalled instances when the principal called her in to speak to her one on one and she appreciated the feedback. She added that working in the hospital for ten years gave her a different perspective on both leadership and followership. When speaking about teachers who were ineffective, she added, "In the hospital, that was not okay. I would be fired, literally that day" (Interview #3, 257-258). She added:

You will always have people who are not going to do what they're supposed to do- you have that in all jobs. It's just that in most other jobs, those people are going to be let go. But, in teaching, they're able to hang on. So, [it] is very important to get them on the same page. How do you get them on the same page? Well, that's a little more difficult, but I think it can be done and you have to have a strong leader that's willing to do it. (Interview #3, 265-270)

**Dana's view of the challenges.** Dana saw the challenges of implementing an all-female, single sex campus as: (1) Hiring the right staff members, and (2) Gaining parent buy-in.

***Hiring the right staff members.*** Dana felt strongly that finding people with the level of commitment needed to work in a school like Ford may be challenging. "Getting the right people...that's our biggest challenge" (Interview #4, 433). She shared that the perception that the students are well-behaved, and thus, the job is not challenging, is misleading to potential candidates.

People sometimes say at interviews everything you want to hear, but when they're actually given the position, they don't realize how much work it is and they think, 'Oh, I want to work there because it's all girls and I won't have to deal with any discipline issues and it'll be like a walk in the park, like this is an easy job.' Then, when they get here, we say, 'Oh, you have to coach, you have to sponsor this, you have to do this, and I don't think they ever worked at a charter school and they don't realize you're on a limited budget with limited staff, but you still want to offer your kids everything that a regular high school or middle school program would have- so there are a lot of extra duties. (Interview #4, 417-425)

When asked how to combat the issue of finding the right staff, Dana explained that having teachers on the interview committee is important.

[During an interview] I'll say, no...what time do you REALLY plan on leaving? Especially if the candidate is going [to be] a math teacher... I have to tutor three days a week because I have kids on a third-grade level in math, but I have to teach, technically, sixth [and seventh] grade Pre-AP [math]. (Interview #4, 427-432)

***Gaining parent buy-in.*** In addition to the challenge of finding committed staff members, Dana also expressed that shifting parent perspectives and achieving buy-in to the rigorous academics can be challenging. She added:

Our parents are very special. Very, very, very, very special...and everybody thinks their daughter is the most gifted child ever. So, I have to have some very difficult conversations sometimes and I have lots of data to say, 'Okay, I know she was GT in kindergarten, but now we need to look at [her] data as a sixth-grader... but, it doesn't click because I get more phone calls [saying], 'My daughter just got her first B ever.' And, I say, 'A B is a very good grade.' (Interview #4, 438-445)

Dana also explained that it was crucial for parents to support the rigorous academics, but that can be hard if they do not have a strong collegiate background.

Getting parents on-board with homework [is hard]. Sometimes they don't understand, 'Well, she went to her grandma's, she didn't have time to do her homework.' Okay, well, you can't really use that excuse in college, so let's rethink this and what they're priorities are. I know that's been a big



thing...getting the parents on-board with the level of commitment, especially at the high school [level] because a lot of our girls, their parents, most of them did not go to college- about 90% of them. So, they may not understand what [the students] have to do in order to be ready for college. And, they also don't understand what [the students] have to do in order to be competitive to get into the colleges they want to get into. So, when you're talking about you want to go to Columbia, well, then you might need to walk the Columbia-walk, and they're taking the best and the brightest. So, it's hard bridging that gap. (Interview #4, 447-458)

Luckily, Dana has found that by having difficult conversations with parents, She is usually able to gain their support.

**Heather's view of the challenges.** Heather saw the challenge of implementing an all-female, single sex campus as: (1) Supporting the needs of a small staff.

*Supporting the needs of a small staff.* Heather stated that, starting out, one of the greatest challenges at Ford Academy was meeting the needs of a very new, very small staff. Very often, most of the teachers were the only ones teaching a particular content area and she found that to be difficult to find support.

As I told you, you wear a lot of different hats, and there's no one on this campus teaching the same thing you're teaching. Even the high school teachers we have, they've got my support, but I'm not teaching what they're teaching... I'm not lesson planning with them. So, to be a teacher here, you have to be very resourceful. You have to be able to make sure that you're going out and finding those resources. (Interview #5, 125-132)

During her first year at Ford, Heather took it upon herself to find a mentor at another campus to help her plan for her pre-AP class.

One night every week, I would go to her school and she would go through labs with me. So, just making those types of connections is important because you're kind of by yourself, in a sense. Nobody is there to teach the same thing you're teaching...it's difficult... (Interview #5, 135-139)

**Victoria's view of the challenges.** Victoria saw the challenges of implementing an all-female, single sex campus as: (1) Moderating political challenges in the community, (2) Gaining parent buy-in, and (3) Hiring the right staff members.

***Moderating political challenges in the community.*** Victoria commented that the negativity and lack of support felt on the campus during implementation was partially the result of misunderstandings about the nature and purpose of the academy.

The comment that this is an elitist program. It's not. It's a different program to meet different needs. And [communicating that understanding] was a challenge.

It still is a challenge, to some degree. (Interview #6, 298-300)

She also shared that some of the negative opinions expressed openly by community representatives when the school first opened were also harmful.

[A prominent community member], he openly said the first year, he didn't want the school here. He wanted to bring back co-ed to [the campus] and openly said that [the Ford Academy for Young Women] needed to be moved or dissolved. He hasn't really changed his rhetoric, he's just shut up about it because the school consistently performs and out-performs everybody else...but, [now] he'll come and speak at events. (Interview #6, 560-564)

***Gaining parent buy-in.*** Victoria has also found it difficult to gain parent buy-in to the high expectations at Ford. She expressed that, sometimes, “Parents just don’t understand... They went all the way through high school, some of them did, some of them didn’t finish, and ‘I never had to do any homework, so I don’t know why she has to’” (Interview #6, 312, 316-317).

When asked how the campus bridges the gap with parents, she replied:

It starts from day one and it’s raising parents into this college culture... We have to mentor the parents into the concept of college. I’ll never forget, we have a parent of a student, one of our early graduates, [he] fought us tooth and nail. He has an older daughter [who did not go to Ford Academy] and she applied to colleges. She was second in her class, really didn’t get any scholarship money. They had to take loans and [she] didn’t really get into any colleges she wanted. [The daughter that attended Ford Academy] has gotten a free ride to one school and money from a couple others. He came back and said, ‘I finally get it.’ But, it took him five years and all we did was fight with him the whole time. (Interview #6, 321-330)

Victoria added that this parent has now offered to speak at the parent orientations to help parents understand. She explained that, no matter what, “The family has to be prepared. Many of them aren’t” (Interview #6, 338).

***Hiring the right staff members.*** In addition to district support and parent buy-in, Victoria also found that hiring the right staff members could be challenging. She explained that this was especially the case with hiring the right principal.

Someone who is pragmatic will probably be very effective in the leadership position [at Ford] because, if you come in here overly optimistic, you'll crash and burn. And, if you're very cynical, this is definitely not for you. But, if you're very pragmatic, this is a great place because you're going to come in with enough optimism and enough skepticism to bridge those gaps and go with the flow.

(Interview #6, 342-346)

In terms of the rest of the staff, Victoria added, "You need very, very, very flexible people who are willing to do an odd number of things, whatever the campus needs. If you're not flexible, this is not the position for you. Not at all" (Interview #6, 346-348).

**Participant Perceptions: Challenges Experienced During the Implementation of an All-Female, Single-Sex Campus**

Violet – Campus Principal

- Sustainability of resources
- Hiring the right staff members

Sharon – District-Level Executive Leader

- Sustainability of resources
- Selecting a principal
- Handling media scrutiny
- Anticipating student attrition
- Pre-implementation planning
- Addressing variability within district systems
- Moderating political challenges

Jenny – Science Teacher

- Hiring the right staff members
- Creating a unified staff committed to the campus vision

Dana – Math Teacher

- Hiring the right staff members
- Gaining parent buy-in

Heather – Science Teacher

- Supporting the needs of a small staff

Victoria – English and Social Studies Teacher

- Moderating political challenges
- Gaining parent buy-in
- Hiring the right staff members

**Figure 8: Participant Perceptions: Challenges Experienced During the Implementation of an All-Female, Single-Sex Campus**

## **Part II: Major Findings**

After an analysis of the individual participants responses, the researcher conducted a cross-participant analysis to reveal the themes that appeared across respondents. The major findings are presented for participants' responses related to key factors, successes experienced, and challenges of the implementation of an all-female, single-sex campus.

### **Key Factors to Successful Implementation of an All-Female, Single-Sex Campus**

The themes that were most prominent in interview responses related to key factors that influenced the successful implementation of an all-female, single-sex campus were: (1) Committed faculty and staff, (2) Principal leadership, (3) Support from the board of trustees, (4) Coordination with district-level offices, (5) Committed advisory council with strong community ties, (6) District support, and (7) Campus vision.

**Committed faculty and staff.** The one factor that each of the six interview participants identified as a key component to the success of Ford Academy was having a committed faculty and staff. Two teachers listed this as the most important factor in the successful implementation of an all-female, single-sex campus. Jenny noted that staff commitment was the most important factor to the success at Ford because the staff exemplified what it means to have a united belief in the vision, purpose, and expectations of the campus.

Commitment went far beyond upholding expectations at Ford. For Dana, committed faculty and staff were not only defined by their buy-in to the campus vision, but also by their commitment to the practice of single-sex education. "They truly have to believe in single-gender education...100% believe in it" (Interview #4, 204).

To most of the interview participants, commitment referred to working extra hours and taking on extra responsibilities, which was generally presented as a given reality at Ford Academy. According to Violet, teachers have multiple preps, sometimes multiple content areas. Teachers are also required to obtain G/T certification, work a week or more in the summertime, and be present for tutorials after school and on weekends. Jenny strongly believed that teachers needed to be willing to put in the long hours and extra duties that were a part of being a teacher at Ford.

Heather explained that it was extremely important to communicate the expectations of the school and the additional responsibilities associated with working there during the hiring process. “It’s different than being at a regular school...there are a lot more commitments” (Interview #5, 29-30). Sharon agreed that selecting committed staff members who were willing to do “just whatever it takes” was a necessity (Interview #2, 383). She also stressed the importance of having a rigorous teacher selection process.

Jenny viewed the assembly of a committed staff at Ford Academy as one of the successes the campus has experienced. Victoria also added that the staff was very committed, adding that the commitment spread to every person in the building, not just the teaching staff. Heather agreed, adding that the ability to conduct a staff selection process when the campus opened was a benefit because the principal was able to interview and select teachers based on their qualifications and commitment to the program.

**Principal leadership.** All participants, except the campus principal, Violet, identified principal leadership as one of the key factors to the success of Ford Academy.

Both Dana and Heather listed the leadership of the principal as the most important factor in the successful implementation of an all-female, single-sex campus.

Jenny and Dana stated that the commitment of the staff was directly related to the leadership of the principal and that teachers were more willing to create and maintain high standards if they knew they were going to be supported by the principal. Heather also explained that the principal was essential in creating a strong campus mission, in assembling and maintaining a committed faculty and staff, and in securing parent commitment. Heather believed that the principal was crucial to ensuring that teachers were provided with opportunities to learn and grow.

Victoria agreed that in order to be successful, the campus needed a strong principal. She stated that the ideal principal needed to be a great motivator, mentor, and coach, but also needed to set and uphold high expectations and run an efficient program. Dana added that another essential criteria for the principal at a campus like Ford was to have someone who fully supported and believed in the merits of single-sex education. Heather stated that, "...if we didn't have a good leader at this school, I could just see how very easily we would just be a regular school that has all girls in it" (Interview #5, 144-146).

**Support from the board of trustees.** Both Violet and Sharon identified support from the Board of Trustees as a key factor in the successful implementation of an all-female, single sex campus. Sharon explained that political support was crucial, especially in times when there was pushback from the community. In addition to political support, Sharon added that the willingness to support an initiative like Ford Academy with financial resources was essential. While political and financial supports



were vital, Ford Academy also enjoyed the benefits of symbolic support from the board. “There’s always a board member attending some function that they have,” Sharon added (Interview #2, 316-317).

Because the Board of Trustees was designed with single-member districts in Lonestar ISD, and students at Ford came from all over the district, Violet strongly believed that it was essential have a member on the board who viewed the campus as a part of his or her constituency. She contended, “...a board member needs to be assigned [to the campus], or it needs to be addressed up front” (Interview #1, 147-148).

**Coordination with district-level offices.** Both Violet and Sharon identified coordination with district-level offices as an important factor in the successful implementation of an all-female, single-sex campus. Sharon noted that coordination with district offices should be a strong consideration in order to ensure that people have a common understanding of the nature, purpose, and needs of the campus. She also believed that it was crucial to establish a common commitment across the district to ensure the success of the project. Violet also commented that coordination with the district was important. She shared that district offices struggled to work with her campus because of how much it differed from traditional campuses within the district.

Sharon added that if she had it to do all over again, she would have created a district-level task force made up of representation from all of the major departments in the district, along with selected stakeholders, to meet regularly in order to problem-solve as a team.

**Committed advisory council with strong community ties.** Both Violet and Sharon described the importance of having a committed advisory council with strong community ties as a factor in the successful implementation of an all-female, single-sex campus. The advisory council for Ford Academy is a body of local business and community partners who work to raise funds for the campus. They have worked to provide funding to help the school offer summer camps focused on math, sciences, and technology, provide equestrian lessons and tennis camps for students, fund research projects, and sponsor college trips. Sharon added that the hard work of the advisory board, and the selection of a well-connected chairwoman, were instrumental in the success of the school. Violet agreed, adding that the opportunities for enrichment would not be possible without the supplementary funding provided by the advisory council. She also noted that experiences provided by the additional funding are the experiences that put the Ford Academy students on a level playing field with other students. Violet explained:

...we have an advisory committee that is very instrumental in helping us establish partnerships in the community, whether with universities, museums, or whomever. Those networks are critical in giving our kids those additional enrichment experiences we want them to have. We've had the symphony come in and perform. We also have the speaker series where we tap into our partners and they come in and share their life experiences with our girls. (Interview #1, 163-169)

Sharon also explained that having an advisory council that is well-connected to the community is not only instrumental in raising necessary funds, but it is also a way to market the school and the district to the community.

**District support.** Although they were expressed differently, Violet, Sharon, and Victoria expressed the importance of having district support at various levels. Sharon stated that the number one factor to the successful implementation of Ford Academy was leadership support at the very top of the organization. She explained, “You have to have leadership at the top that is committed to the project and will devote the time...you have to clear the path for a special school to be special and to be successful” (Interview #2, 286-290).

Sharon also noted that it was important to secure the commitment and buy-in of offices and departments throughout the district, which she felt could be best done through open communication and working to ensure a common understanding of the campus and its purpose. She explained that she worked very hard to ensure that principals understood that Ford was not targeting the highest achieving students and “stealing” them. Victoria also commented that the campus would have fared better had there been a better sense of acceptance by the district, noting that there was a sense of animosity from the teachers and staff that were in the building prior to it being closed and reopened as the all-girls campus.

Violet added that it was important to ensure that the mission and the purpose of the campus were properly communicated throughout both the district and the community. She also explained that the community and district needed to be understanding of necessary growing pains that a new campus experiences and that proper communication

was the key to that understanding. She also commented that the district must be willing to support the initiative, even when things are challenging. “The district needs to be ready to stand by its commitment, and the commitment by the district at this school is to fully develop it from sixth grade through twelfth grade” (Interview #1, 142-144).

**Campus vision.** Heather stated that a key factor to the successful implementation of Ford Academy was having a clear commitment to the campus vision. Jenny and Dana remarked on different variables related to having a strong campus vision. Jenny noted that the campus’ unwavering focus on upholding high expectations was a key factor in the success of the campus. Dana commented that the focus on preparing the young ladies for college was important. She also stated that part of the vision was to prepare them to be confident and assertive, yet still be a lady.

We [the teachers] would sit for hours in the summer planning...what are we going to teach them as females? How to shake a hand, how to make eye contact, how to ask a question, how to make a phone call. Almost every single one of the teachers was in their second career. And [we] came from very male dominated careers. One of our teachers was a cop...I came from corporate America. One of the other females came from the military...one teacher was an engineer. We were very passionate about starting an all-girl’s school because we had all been labeled. I was labeled coming out of college...as a man, he’s assertive, but as a woman, she’s a witch...there were a lot of those conversations where we had been insulted as women. How do we show our girls how to be confident and yet not lose their femininity...to be proud of still being a lady (Interview #4, 87-91, 104-111).

A variable that continued to surface in relationship to campus vision was the notion of high expectations. Dana stated that Ford was successful because expectations were set, as well as consequences for not meeting those expectations. She also believed that the first year of implementation was crucial for establishing those expectations.

Heather's view of the campus vision for Ford involved both establishing a college preparatory environment and high expectations. She stated that both of those were closely linked to the professional development teachers received during the summer. Teachers participated in the weeklong AVID Institute, content-area Pre-AP workshops, as well as the Laying the Foundation training. "...that [training] gave me the focus of where I needed to have my kids at, because it's at that rigorous, higher level. That was very good training" (Interview, #5, 55-57).

Both Jenny and Heather believed that the key to having a strong campus vision was having a strong principal. Jenny, in particular, felt that the principal needed to be strong enough to deal with ineffective staff members who were not committed to the campus vision. They both believed that it was easier for teachers to uphold high standards if they knew they were going to be supported by the principal. Heather believed that it was the responsibility of the principal to ensure that professional development opportunities reflected the campus mission. She also believed that it should be present in both the teacher and student selection processes.

### **Secondary Findings for Key Factors**

Through a review of the data, conversations alluded to several key elements that emerged that were not specifically listed across participants as key factors. In addition to those specifically listed across participants, the researcher noted that emergence of

additional factors to the successful implementation of an all-female, single-sex model of school reform: (1) Student selection, (2) College readiness-oriented professional development, (3) the Foundation for the Education of Young Women, and (4) Community partnerships.

**Student selection.** Although student characteristics was only listed as a major factor by Dana, additional participant responses consistently highlighted the importance of choosing motivated students. Several participants made a point of noting that the campus goal is to recruit and admit students who are motivated to achieve, not that they recruit the best and brightest from the district. Sharon commented:

We take all kinds of girls...yes, it's been challenging for them and some have not been successful, but we don't limit ourselves. ...There are some girls that take two or three buses to get to school every day. It's so amazing to me what people are willing to go through for an education. (Interview #2, 467-474)

Dana also commented on the importance of selecting highly motivated students as a factor in the success seen at Ford. She stated:

There's always the misconception that you need the brightest kid and sometimes those kids are the ones that leave. It's that kid that wants it the most, that's willing to work, and do the work, and come to tutoring and asks questions. Those are the kids that get the most out of this. (Interview #4, 190-193)

**College readiness-oriented professional development.** Three of the teacher participants noted the importance of professional development related to college readiness. Each felt that it helped raise the level of expectations on the campus and the level of instruction in the classroom. Jenny explained:

We had lots of in-services so we were very sure where the standards were and we had lots of professional development. We went to AVID in Dallas as a whole campus...they would talk to us about the [expectations] the first year. So, it was very clear where the standards were as a teacher and where I needed to be.

(Interview #3, 16-20)

Heather added:

We went to Laying the Foundations, which is a pre-AP professional development, and that gave me the focus of where I needed to have my kids, because it's at that rigorous higher level. That was a very good training. (Interview #5, 54-57)

**The Foundation for the Education of Young Women.** Both administrative participants spoke about the support they received from the foundation and the strength of the model. The foundation was also listed as a major source of funding for the start-up of the campus. Violet also noted that the FEYW also helps the campus coordinate their student tracking data so that they are better able to monitor their success with students after they exit the program. She also noted that the FEYW helps the campus coordinate professional development opportunities. She explained, "The professional development at the district-level may not be what is most relevant to our teachers. So, through FEYW, we network and coordinate opportunities with other campuses like ours" (Interview #1, 200-202).

**Community partnerships.** Another theme that continued to emerge was the importance of community partnerships that were organized through the advisory council. These partnerships were used to fund many of the enrichment opportunities for students

on the campus, including equestrian lessons, and numerous summer learning opportunities. Violet explained:

...[the] advisory committee is very instrumental in helping us establish partnerships out in the community, whether it is with university, the museums, or whoever. Those networks are critical to giving our kids those additional enrichment experiences we want them to have. We've had the symphony come in and perform. We also have the speaker series where we tap into our partners and they come and share their life experiences with our girls. So, that's always a plus.

(Interview #1, 163-169)

### **Successes Experienced During Implementation**

The themes that were most prominent in interview responses related to the successes experienced during the implementation of an all-female, single-sex campus were: (1) Student achievement and development, (2) Safe, nurturing campus culture, and (3) Parent and community support.

**Student achievement and development.** Sharon stated that the greatest success of the Ford Academy implementation were the students themselves. She reflected on how the girls evolved from being young girls, too shy to look an adult in the eye, to becoming confident, gregarious young ladies. "The things that they have accomplished – that's our greatest success" (Interview #2, 630-631).

Victoria also believed Ford has experienced a tremendous amount of success with students from around the city, some with very poor backgrounds and with very little exposure to the experiences associated with academic achievement. She noted that the campus had helped students become successful on a relatively limited budget, but that



they were able to do so because of the hard work and dedication put forth by the teachers and by the creation of a safe, nurturing learning environment.

Heather stated that the campus excelled at developing leadership skills and confidence in students. Violet was particularly proud of the campus' focus on developing students' character. "We tell them...we will do no justice...if we have the smartest kids, but their character is not what it needs to be" (Interview #1, 345-346).

Closely linked to the success and development of students was the sense of pride participants felt had been instilled within the girls. Dana explained that the campus and students worked very hard to built a sense of pride at Ford, but that this pride was not established easily. "They were made fun of on the bus. They were the only ones in plaid and they got called dykes. They got called every other imaginable thing they could possibly call them. They were made fun of every day" (Interview #4, 362-366). Looking back, however, Dana believed that those were character-building experiences for the students. She also found it remarkable that, years later, the same students who were bullied for wearing the trademark uniform skirt are now proud to wear it. She felt it now represents a sense of belonging and prestige. "And now, the sixth graders are so funny because they'll say, 'I sleep in my skirt' or they'll wear their uniform on some Saturdays so that people will ask them where they go to school" (Interview #4, 403-405).

Dana also believed that student success and development were related to the student selection process, which focused on choosing students who were motivated, rather than students who had demonstrated academic achievement. "...I think *that's* what's created success – because our kids work really, really, really hard for us" (Interview #4, 199-200).

**Safe, nurturing campus culture.** A descriptor that was frequently used by participants when describing the campus culture was sisterhood. Both Jenny and Dana shared that the sisterhood they established on the campus was one of their greatest successes. Jenny noted that sisterhood was built by focusing on building the girls' self-esteem, character, and by teachers working to form a connection with the students in their "prep" class. During prep class, teachers presented lessons on behavior, poise, assertiveness, and the importance of encouraging one another. For teachers, the students in their prep class were their mentees. Jenny stated that, "...this is your group of students. You need to watch over them, take care of them. ...I refer to myself as their 'Prep Mom'" (Interview #3, 168-170).

Violet explained that the nurturing campus culture was closely tied to the strong focus on character development. She told the story of a sixth grade student who turned in an iPhone she found in the restroom. A district administrator who witnessed this event commented, 'I never would have believed that if I hadn't seen it with my own eyes.' Violet explained, "That's what we nurture here. We tell them sisters don't steal from each other, sisters don't hurt each other...it's a culture we cultivate here" (Interview #1, 348-356).

Dana commented that the commitment to sisterhood and the life lessons designed to develop self-esteem were important. She explained:

The girls rate their self-esteem level and talk about each piece of that and how it relates to their life. How does your self-esteem connect with school? How does it connect to dating? How does it affect your friendships? Your grades? Then, for our older girls, how does it affect dating? How does it affect your choices with

drugs? And those conversations we had when they were in seventh grade? They stuck. (Interview #4, 125-132, 156)

Victoria also noted that the creation of a safe, nurturing environment was one of the greatest successes at Ford. In particular, she expressed her love of the fact that the environment allows girls to be girls, a sentiment also shared by Jenny. Victoria explained, “[We]’ve created a very safe, nurturing...environment where a girl can be a girl, and she doesn’t have to be a pseudo-woman” (Interview #6, 224-227). She found it remarkable that girls at Ford in the seventh grade played with Barbie dolls, something she had never seen at a traditional middle school.

As much as she cherished the safe environment for middle school girls, Victoria also expressed concern about whether or not the model was *too* safe for high school students. In particular, she expressed concerns for her own teenage daughter.

I do believe the single-gender environment is a safer environment...I love that my daughter can come here and she doesn’t have to worry about how she looks and she doesn’t have to worry about getting hit on, or somebody squeezing her butt in the hallway, or things of that nature. But, at the same time, she’s 16 years old...and I’m terrified as to her socialization with regards to men because she hasn’t had any and she’s about to go off to college. (Interview #6, 370-380)

Regardless, Victoria believed that the environment they’ve created allows students to remain sheltered long enough to develop the wisdom and confidence to make better choices as they grow older.

**Parent and community support.** Nearly every participant addressed the importance of parents and community at Ford. Both Violet and Heather described the

level of parent involvement at Ford as a success. Violet stated that the requirement for parental involvement and the system of accountability they created were helpful. “It helps us get that parent involvement where we need it” (Interview #1, 270-271). She also added that parent involvement helped establish parent buy-in to the high expectations the campus has for students.

In addition to parent support, Heather also noted the importance of involving the community in events on campus, as well. She noted that it was important to gain their support and for members of the community to witness what the school was doing and what the girls were accomplishing.

### **Challenges to Successful Implementation of an All-Female, Single-Sex Campus**

The themes that were most prominent in interview responses related to the challenges experienced during the implementation of an all-female, single-sex campus were: (1) Hiring the right staff members, (2) Planning for sustainability of resources, (3) Moderating political challenges within the community, and (4) Gaining parent buy-in.

**Hiring the right staff members.** The most commonly noted challenge to the implementation of an all-female, single-sex campus was the difficulty of hiring the right staff members. Violet noted the amount of commitment required to work on the campus and that teachers have many additional duties, such as coaching, club sponsorship, tutorials, and Saturday school. “It is a very small campus...people wear many hats” (Interview #1, 237-238).

Dana and Jenny shared that finding people with the commitment needed to work at Ford may be challenging because of misperceptions about the school. Both agreed that the perception that students are well-behaved, and thus, the job is not challenging, is

misleading to potential candidates. Dana added, “People sometimes say at interviews everything you want to hear, but when they’re actually given the position, they don’t realize how much work it is and they think, ‘Oh, I want to work there because it’s all girls and I won’t have to deal with any discipline issues....like this is an easy job” (Interview #4, 417-421).

Both Dana and Jenny also noted the importance of the hiring process in helping to meet this challenge. Candidates need to understand that it takes a lot of work. Dana noted that having teachers on the interview committee is important. Violet and Sharon shared that having students on the committee was essential and that, in most cases, they were the toughest critics of all.

Jenny commented that candidates needed to understand the workload, but that the most important characteristic to look for in hiring is mindset. She explained that it was crucial to make sure they “see the best in every single kid and that they expect the best from every kid. It doesn’t matter what their background [is]” (Interview #3, 203-205).

In addition to finding hard working, committed staff members, Violet also spoke about the challenges of working with a small teaching staff, which placed a significant strain on the creation of the master schedule. She stated that the best strategy to meet this challenge is to recruit and hire teachers with certifications that allow them to teach multiple grade-levels or multiple subjects.

Although they noted the importance of hiring the right staff, both Sharon and Victoria expressed how crucial it is to hire the right principal. When asked her advice to other districts considering an all-female campus, Sharon added, “I think [you must] be extremely selective in a principal and making sure you have someone who has the same

high standards that you want for the school.” She cautioned, “Sometimes you can look for one component in what you want in that leader and completely miss the other important components” (Interview #2, 676-679).

**Planning for sustainability of resources.** Several interview participants noted the challenges of acquiring adequate resources during implementation. Although the Foundation for the Education of Young women provided grant funding to assist with start-up costs, Sharon added that there were still significant resources required to open and operate the school. “We found the resources to do it, but sometimes it was hard” (Interview #2, 680-81). She added that when a school was closed in Lonestar ISD, whatever was bought for that school followed the children. “So, then you have this schoolhouse with nothing [in it], and you’re scrambling to find [resources]. We couldn’t equip it with brand new furniture. We had a warehouse and that principal [had to be] very resourceful” (Interview #2, 171-174).

Violet stated that it was important to plan for sustainability with resources and to be strategic with how limited resources were spent. Both she and Violet noted the importance of working closely with the advisory board to help secure the additional funds needed to fund activities and initiatives for students.

Heather noted that, starting out, one of the greatest challenges at Ford Academy was meeting the needs of a very new, very small staff. Very often, teachers were the only ones teaching a particular content area, which she found difficult to support. She added, “...To be a teacher here, you have to be very resourceful. You have to be able to make sure that you’re going out and finding those resources” (Interview #5, 125-132).

**Moderating political challenges within the community.** Although Lonestar ISD held community meetings to explain the creation of Ford Academy, there were political challenges within the community, particularly in the beginning. Sharon recalled the first induction ceremony for students. “Parents and children whose schools were being closed boycotted the induction ceremony and came in with signs...as we started going through the induction ceremony, they started screaming and yelling out, ‘You took our school!’” (Interview #2, 704-706). She added, “Politically, in the neighborhood, it was kind of rough the first year. [The middle school that closed] was a revered school; it had been there forever and so many people had gone through that school” (Interview #2, 540-544).

In addition to community members who were upset about the closing of the middle school, Dana also remarked on the political difficulties experienced by people who disagreed with the practice of single-sex education:

[Angry community members] sat out in front of the school with signs...even when we had camps... [they were] telling the girls that we were going backwards in time, that they were losing their rights. It was very intimidating for the girls and very intimidating for us. (Interview #4, 278-281)

The campus decided to treat the protests as a learning opportunity for the girls. Dana recalled:

We told the girls, ‘Don’t pay attention. Just walk in the door.’ We just explained....that legally, you can have a single-gender school...you choose to come here, we’re not making you come here... [We] also told them that everybody has the right to their opinion and if there’s something that you don’t

believe in one day, then you have the right to picket. You have the right to freedom of speech. So, don't think of [the protests] as a negative thing. Think of it as the people choosing to use their voice in this way. So, how are you going to use your voice? And it worked. (Interview #4, 283-290)

Over time, the campus began to experience higher levels of support from the community. Sharon explained:

Eventually, it died down and fortunately, some of the girls who were at [the middle school that closed] came to [Ford Academy]. The community, even the local [neighborhood] community, really embraced [the campus]. And it has really helped the status of the neighborhood because now they have this gender-based school in their community. It's an attraction now. We've even had some parents move into the neighborhood because their daughter is going to school there. That whole area is being developed now. (Interview #2, 544-546, 601-603)

Dana also noticed that, over time, the political sentiment within the community improved, but she added that it was a lot of hard work that ameliorated the situation:

Yeah, [it felt like] nobody really wanted us here. But, the whole time, we were [like], 'We're gonna prove'em wrong...we're gonna do this, we're gonna take these girls and do whatever we can in the time allowed.' ...after the first year, when our girls showed up in every major newspaper in [the city], and the scores came out, and everything [the students] were doing was positive, it got better. (Interview #4, 292-301)

Sharon also noted that the campus principal was very good at reaching out and involving the community and neighborhood. Jenny agreed and added that the principal's



attitude towards the negativity was helpful. According to Jenny, the principal addressed the hostility by stating that “We’re going to do what we’re supposed to do and when it’s successful, the [negativity] will die down” (Interview #3, 42-44).

**Gaining parent buy-in.** Victoria, Heather, and Dana expressed how essential it was to have parent buy-in and commitment to the high expectations at Ford. Both Victoria and Dana listed parent buy-in as a challenge, noting the difficulty of helping parents understand how the high standards at Ford were necessary to ensure college readiness, especially for parents who themselves did not have a strong collegiate background. Although she did not list it as a challenge, Heather also stated that the success of the school depended on parents upholding the high expectations, supporting the students, and understanding that, although it may be challenging, their support was needed to ensure student success.

Sharon noted that it was necessary for the district to support the campus’ expectations in the face of resistant parents. She recalled an instance where she spoke to a parent who complained about how difficult the work was at Ford. Sharon reminded the parent:

This is a special opportunity to come to this school, a special privilege...we never promised you it would be easy. What we promised you was that if your daughter comes here...we’ll do everything we can to find a college that will accept [her]. That’s what we promised and that’s what we’re going to continue to work towards... I’m telling you [that] you have a choice... if your daughter stays at this school, we’re not changing our expectations. (Interview #2, 731-740)

## **Summary**

This chapter provided an overview of the findings related to the research questions. This chapter was divided into two sections. Part One detailed the individual participant perceptions regarding the factors necessary to successful implementation of an all-female, single sex campus, as well as an overview of their perceived successes and challenges experienced during implementation. Part Two presented a synthesis of the major findings related to the research questions. Chapter Six will present a summary of the findings, conclusions and implications for practice and research.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSIONS, AND IMPLICATIONS**

This chapter will present an overview of the study, a summary of the major findings and their relationship to the literature, a theoretical explanation of the factors influencing the implementation of an all-female, single-sex campus, and concluding remarks, including implications for practice and future research.

#### **Re-Statement of the Problem**

One of the most rapidly developing areas in school improvement research examines the relationship between the implementation and outcomes of whole-school reform models (Datnow, Hubbard, & Mehan, 1998; Datnow, 2000; Datnow & Stringfield, 2000; Datnow, Borman, Stringfield, Overman, & Castellano, 2003; Desimone, 2002; Rowan, Barnes & Camburn, 2004). The existing research focuses on specific reform models that grew from the Comprehensive School Reform Demonstration Act, such as Accelerated Schools Project, Co-NECT Schools, Expeditionary Learning Outward Bound, and Modern Red Schoolhouse, among others (McChesney & Hertling, 2000). To date, however, there is limited research investigating the implementation of public, single-sex, whole-school reform models (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). Although research on the effectiveness of single-sex education has been both limited and inconclusive (Datnow, Hubbard, & Conchas, 2001; Mael et al., 2005; Warrington & Younger, 2003), districts across the nation continue to implement whole-school, single-gender programs, with a higher number of all-female models being created nationally (Bradley, 2006; Chadwell, 2010). In the absence of a recognized framework regarding the implementation of single-sex programs, single-

gender reform programs are often introduced without adequate preparation, leaving schools unprepared to undertake the necessary steps to provide truly effective single-sex education (Hanover Research, 2012). As the implementation of all-female, single-sex models continues to grow in American public schools, there is an increasing need to focus on the implementation of single-sex reform efforts by successful prototypes (Datnow et al., 1998) to gather descriptive data that will contribute to a better understanding of the complexities associated with single-sex school implementation (Datnow et al., 1998; Williams Harris, 2009).

### **Purpose of the Study**

Research regarding the successful implementation of all-female, single-sex education as a whole-school reform model is limited (Bradley, 2006; Bradley, 2009; Datnow, Hubbard, & Conchas, 2001). Therefore, the purpose of this study was to explore the implementation experiences of school leaders and teachers in a public, all-female, single-sex campus that has experienced successful student outcomes, as evidenced by receiving the highest rating from the state accountability system in 2010-2011.

### **Research Questions**

Three questions guided this study:

1. What are stakeholder perceptions of the factors that influenced the successful implementation of an all-female, single-sex, whole-school reform?
2. What are stakeholder perceptions of the successes experienced during the successful implementation of an all-female, single-sex, whole-school reform?

3. What are stakeholder perceptions of the challenges to the successful implementation of an all-female, single-sex, whole-school reform?

### **Overview of the Methodology**

This qualitative study used a grounded theory approach and a case study design to examine the implementation of whole-school single-sex reform on a campus that experienced successful student outcomes. The intent of a grounded theory study was to move beyond a description of a phenomenon towards the generation of a theory of actions, interactions, or processes revealed through interrelating categories of information developed through a constant comparative analysis of data collected from individuals who experienced the phenomenon (Creswell, 2007). A case study method was chosen to ensure a thorough examination of stakeholder perspectives regarding the implementation of single-sex education as a whole-school reform model on a successful prototype campus (Datnow et al., 1998).

In order to study the phenomenon of implementation of single-sex education as a whole-school reform model, the bounded system, or case, in this study was an all-female, single-sex campus (Merriam, 2009). Participants for this study were selected through purposive, theoretical sampling (Merriam, 2009), as they needed to have experienced the implementation of the single-sex reform. Data were collected through semi-structured interviews, an open-ended questionnaire, and a review of documents. The researcher utilized a referral, or “snowballing”, technique to generate the interview candidate pool. Interview sessions were audio taped and later transcribed. To produce a substantive theory, data analysis followed the open, axial, and selective coding processes outlined by Strauss and Corbin (1990).

## **Summary of Major Findings**

This study explored the implementation experiences of stakeholders who participated in the successful implementation of an all-female, single-sex campus as a model of whole-school reform. The research examined stakeholder views of the factors that influenced the implementation process, as well as their perceptions of the successes and challenges they experienced. The analysis of the findings from multiple data sources allowed the researcher to construct a theoretical explanation of the factors influencing the successful implementation of an all-female, single-sex campus in this case. The following is a summarized account of the findings with connections to the literature.

### **Key Factors to Successful Implementation of an All-Female, Single-Sex Campus**

Based on a cross-participant response analysis, the emerging factors that influenced the successful implementation of an all-female, single-sex campus were: (1) Committed faculty and staff, (2) Principal leadership, (3) Coordination with district-level offices, (4) District support, and (5) Campus vision. Two factors emerged as contributions to existing literature: (1) Support from the board of trustees, and (2) Committed advisory council with strong community ties.

**Committed faculty and staff.** Faculty and staff commitment to both the high expectations of the campus and to the practice of single-sex instruction was a crucial factor in the implementation. Commitment also refers to the willingness to put in the effort and time to helping meet the needs of the students and campus and to making the model work. Research on whole-school reform supports the idea that an important element in implementing a whole-school reform model is the level of commitment on the part of both administrators and teachers (Berends et al., 2001; Datnow, 2000; Desimone,

2002; Vernet et al., 2006; Waters 1999). In particular, research supports securing the early commitment of teachers to the adopted model (Vernez et al., 2006) and that the ultimate success of the implementation relates heavily to the belief systems of the teachers (Berends et al., 2001).

Also, it is noted that student achievement is enhanced in single-sex environments when a student is placed with an effective teacher who strongly believes in the merits of single-sex instruction (Warrington & Younger, 2003).

**Principal leadership.** Strong principal leadership, particularly in the area of maintaining high expectations and a commitment to the campus vision, is a key factor in the implementation of this model. It is essential that the principal be willing to hold both students and teachers accountable for the meeting the expectations of the campus. Also, the principal is critical in the teacher hiring, coaching, and evaluation process for ensuring that staff members uphold the mission and vision of the campus. The idea that strong principal leadership is a major factor to the successful implementation of an all-female, single-sex campus is supported by literature related to the implementation of other whole-school reforms (Berends et al., 2001); Berends, Bodilly, & Kirby, 2002; Desimone, 2000; McChesney & Hertling, 2000; Rowan et al., 2004).

**Coordination with district-level offices.** Coordination with district-level offices to help ensure the successful implementation of an all-female, single-sex campus is crucial, especially when dealing with funding or policies that may be uncommon for the district. The literature suggests that a lack of alignment between a new reform and state or district standards may negatively affect the implementation (DeSimone, 2000; Datnow, 2000; Vernez et al., 2006). Administrative leadership at both the campus and

district-levels have much to do with the successful implementation of single-sex reform, particularly at the district-level where it is important for administration to be active in both the planning of the reform and in assisting with the coordination between the campus and district offices (Chadwell, 2010).

**District support.** District support is a key component to the implementation of an all-female, single-sex campus. This includes having the symbolic and political support of district staff, other campuses, district-level offices, and the advocacy of an executive-level leader. This is congruent with findings that suggest a clear relationship between high levels of district support and positive impacts on implementation (Datnow & Stringfield, 2000). Desimone (2002) found that teachers also view an adequate supply of resources as a sign of the district's commitment to the chosen reform. Without a doubt, the school district has a very powerful ability to help create an environment that will promote the realization of the reform (Rutherford, 2009).

**Campus vision.** A clear campus vision involving high expectations, college readiness, and gender equity is essential to the implementation of a single-sex campus. This supports the notion that having clear expectations about the intended outcomes positively impacts the implementation of a reform (Berends et al., 2001). In addition, the existing research clearly points to the importance of implementing single-sex programming with a clear vision for emphasizing gender equity (Datnow, Hubbard, & Conchas, 2001; Herr & Arms, 2004; NASSPE, 2012). Therefore, classes and programming should be designed to address the students' gender-based developmental needs (Spielhagen, 2006, April).



## **Contributions to Existing Literature on Key Factors**

This study also uncovered two factors that have not been previously recorded by existing literature on whole-school reform implementation or single-sex campus implementation: (1) Support from the board of trustees, and (2) Committed advisory council with strong community ties.

**Support from the board of trustees.** As the governing body of the district, the school board has tremendous influence on major factors, such as budget and staffing allocations. The administrative participants in this study stated that support from the board of trustees was a crucial factor to the successful implementation of an all-female, single-sex campus. Although the literature on whole-school reform and single-gender reform supports the importance of other district-level supports, this finding appears to be a new contribution to existing literature.

**Committed advisory council with strong community ties.** The successful implementation of an all-female campus was enhanced by the existence of a committed advisory council that had strong community connections. The advisory council was noted as an asset for providing resources through partnerships and by networking to help promote the campus within the community. Although existing literature supports the need for adequate resources and for partnerships with reform foundations, such as the FEYW, the finding related to the importance of a committed advisory council with strong community connections appears to be a contribution to existing literature on factors affecting the successful implementation of an all-female, single-sex campus.

## **Successes Experienced During Implementation**

According to the findings, it appears that the effective implementation of an all-female, single-sex campus results in specific successes. These include: (1) Student achievement and development, (2) Safe, nurturing campus culture, and (3) Parent and community support.

**Student achievement and development.** The research findings from this study clearly showed that Ford Academy focused on student achievement and social-emotional development and participants commented that they have been successful in achieving both. As previous studies suggest, one of the primary strengths of all-female environments is the creation of a healthy, accepting, academically focused learning environment focused on enhancing girls' self-esteem, developing interest and competency in math and science, providing leadership opportunities, and opening access to non-traditional career paths (Rogers, 2008a; Salamone, 2003). Further literature suggests the learning environment in all-female settings promotes empowerment for young women, providing them with high levels of interpersonal support and increased leadership development opportunities, both of which are advantageous for girls (Hoffman, Badgett, & Parker, 2008; Salamone, 2003).

Student development is enhanced by being placed in an empowering environment, but also by having high levels of student motivation within that environment. Therefore, it can be affirmed that it is important to have students who voluntarily enrolled in single-gender settings (Hoffman, Badget, & Parker; Rogers, 2008b; Spielhagen, 2006, April).

**Safe, nurturing campus culture.** Ford Academy has created an environment where sisterhood is cultivated and where a girl is free to be a girl. As other researchers suggest, all-female settings create a safe environment where girls respond more willingly and with greater frequency (Rogers, 2008b; Stowe, 1991). All-female settings have also been linked to an increased focus on academics and have shown to result in fewer disciplinary referrals (Rogers, 2008b). The single-sex campus environment has been shown to provide girls with relief from the pressures related to concerns about their appearance (Chadwell, 2010; Salamone, 2003).

**Parent and community support.** Interestingly, the findings in this study show that parent and community support can be viewed as both a success and a challenge. The campus and district attempt to cultivate both because they are considered vital to the success of Ford Academy. This supports the idea that parent and community involvement produce positive reform implementation outcomes (Ross et al., 1997b). Parent and community awareness and support of whole-school reform efforts have also been shown to increase motivation of both students and teachers (Desimone, 2002). Desimone (2002) also notes that there is literature lacking on insight into how to gain parent and community support in the implementation of whole-school reform models.

### **Challenges to Successful Implementation of an All-Female, Single-Sex Campus**

The most prominent challenges experienced during the implementation of an all-female, single-sex campus can be grouped in the following: (1) Hiring the right staff members, (2) Planning for the sustainability of resources, (3) Political challenges within the community, and (4) Educating parents and gaining buy-in.

**Hiring the right staff members.** This study suggests that one of the greatest challenges of implementation is hiring staff members who are committed to putting in the necessary time and effort, as well as who possess the belief system that is required for success on a single-sex campus. Research supports the importance of teacher commitment to single-sex education in the successful implementation of a single-gender campus (Chadwell, 2010; Hoffman, Badgett, & Parker, 2008; Warrington & Younger, 2003). Teachers and their ideologies about gender greatly impact implementation (Datnow, Hubbard, & Conchas, 2001). Unfortunately, in situations of poor planning or staff shortages, teachers who do not want to work in a single-sex environment do so and are forced to acquire the knowledge, skills, and attitudes needed to be successful (Rogers, 2008b). As a result, professional development related to single-gender and achieving buy-in becomes important (Chadwell, 2010). However, many single-sex programs are implemented without the appropriate single-gender professional development to support teacher readiness (Bradley, 2006; Datnow, Hubbard, & Conchas, 2001; Rogers, 2008b; USDOE, 2008).

This study suggests that the process of teacher selection is the greatest strategy to achieve teacher commitment and buy-in, not necessarily professional development, as suggested by earlier research. Instead, professional learning related to college readiness was found to be much more important. Thus, in order to achieve teacher commitment and buy-in, it is essential to hire teachers who are already committed to the model.

**Planning for sustainability of resources.** Both administrator participants in this study spoke about the importance of resources and how challenging it was to equip a restructured campus, provide additional enrichment opportunities for students, and to

provide support for a small startup staff. Previous research on the implementation of whole-school reform addresses resources as a district obligation, finding that district leadership is important in the implementation process by helping to ensure a steady stream of resources needed to support the reform (Datnow, 2000; Rutherford, 2009; Vernez et al., 2006). As noted, a study by Desimone in 2002 suggests that the allocation of sufficient resources is taken by teachers to be a sign of the district's commitment to the reform. This study supports the notion that, while it is certainly important to have the district's commitment to providing resources, the creation of an active advisory council with strong community ties played a role in obtaining resources for the campus.

**Moderating political challenges within the community.** The first year of implementation was difficult due to political challenges within the community. While the district and campus engaged in many of the research-based strategies, the involvement of the community in the selection of the single-gender model was not listed. However, research suggests the importance of including stakeholders in the process for model selection (Datnow, 2000; Desimone, 2002; Rowan et al., 2004; Vernez et al., 2006, Waters, 1999). Others also point to the importance of district administration supporting implementation by helping to moderate the political environment and by having district leadership openly express support for the reform (Rowan et al., 2004).

According to Chadwell (2010), districts undertaking the implementation of single-sex reform should engage in effective communication preparation during the pre-implementation planning phase because single-gender programs, in particular, tend to experience high levels of circumspection. Districts must be able to explain to the community the rationale for implementation, the expected outcomes, and must be

prepared to address questions about gender stereotyping (Chadwell, 2010; Salamone, 2003).

**Educating parents and gaining buy-in.** Garnering parent buy-in and commitment to the high expectations of the campus emerged as a challenge. In particular, staff members noted the challenge of helping parents understand and support the high expectations needed in a college-going culture. Although there is whole-school reform research related to the importance of parent support in reform implementation (Ross et al., 1997b), Desimone (2002) noted that the literature is lacking on insight into how to gain parent involvement in whole-school reform implementation. This highlights a possible area for further study.

### **Grounded Theory Explaining the Factors Influencing the Implementation of Whole-School, All-Female, Single-Sex Reform**

Following a review of the major findings, the researcher was able to create a theoretical model using the process outlined by Strauss & Corbin (1990). The participants' perceptions and major findings generated many common categories of responses. Based on these categories, the researcher analyzed the relationships between responses in order to create a theoretical diagram. Strauss and Corbin (2008) describe a diagram as a visual device that portrays possible relationships between concepts. It enables researchers to organize and keep record of their concepts, but also serve as a means of organizing ideas. Most of all, a diagram forces a researcher to think about a large amount of data in a manner that reduces the data down to their essence (Strauss & Corbin, 2008, 125).

The creation of the theoretical diagram for this study began with theoretical field note sketches. During the early coding process, the diagram became more elaborate and complex and truly became a living document. After several modifications, the completed theoretical diagram provides a conceptual visualization of the central phenomenon (the implementation of an all-female, single-sex campus) as a linear process, the strategies and where they were applied within the process, and the causal conditions (factors). The diagram also represents the core category (influence) as it relates to the causal conditions (factors) and their influence on the central phenomenon (the implementation).

### **Implementation Process**

The process of implementation is complex and occurs in a linear fashion, proceeding in three phases: (1) Pre-implementation planning, (2) Campus Preparation, and (3) Campus Model Implementation

**Pre-implementation planning.** The initial decision to implement an all-female, single-sex campus as a model of whole-school reform can be prompted by a number of variables, including advocates for practice of single-sex education and the availability of grant funding. In this case, there was both an availability of grant funding and single-sex education advocates within the school district. Once the decision to implement was made, the pre-implementation planning activities included:

- Entering into an agreement with the Foundation for the Education of Young Women,
- Outlining and securing sources of funding,
- Selecting a campus site,
- Creating a site restructuring plan, and

- Selection of an advisory council chair and creation of the council.

**Campus preparation.** After the initial pre-planning activities were completed, the process moved towards preparing a campus for model implementation. The first activity in this process was the selection of the campus principal. After the campus principal was hired, the campus preparation activities included:

- Teacher and staff selection,
- Planning and implementing professional development related to college readiness,
- Campus planning, and
- Outlining process for and conducting student selection.

**Campus model implementation.** The final phase of implementation is when the campus opens and the FEYW model is implemented. The components of the model implementation were:

- Campus focus on the core values:
  - College readiness,
  - Leadership development,
  - Wellness-life skills, and
- College preparatory curriculum and instruction.

### **Development of a Core Category: Influence**

In grounded theory, the researcher strives to identify a “core category”. As previously stated, the core category, *influence*, is the concept that all other concepts revealed through data relate to and that has the greatest explanatory relevance and highest potential for linking all of the remaining groups together. Although the central category



may, in fact, be revealed during the open coding phase of the data analysis, it may also evolve from further study of the coding if the researcher felt that none of the existing categories capture it completely. The researcher determined that none of the categories identified during open coding were appropriate to be the core. Further analysis revealed that all of the categories were related to a common concept: *influence*. Although the categories did not necessarily relate to one another, they each related to the implementation of an all-female, single-sex campus in that they each had *influence* over the central phenomenon.

### **Factors Influencing Implementation**

The categories that developed during open coding were grouped by their relationship to the core category, influence. The researcher initially determined that there were three causal conditions, or factors related to the successful implementation of an all-female, single-sex campus: (1) External factors, (2) District-level factors, and (3) School-level factors. As the theory development evolved, the category of Community became increasingly difficult to delineate. Originally, the researcher linked Community with the External factors. After revisiting the data, however, it was determined that, due to the closeness of the community to central phenomenon and the high level of involvement, it did not belong with the External factors, which were much further removed, and much less volatile. The Community category was then placed as a District-level factor. Continued analysis, however, led the researcher to determine that the Community category did not specifically relate to the District-level factors as an influence, because it was not an element that was within the scope of the district's control; it was, in fact, a level of influence of its own. Thus, the factors influencing the implementation of

the all-female, single-sex campus in this study were: (1) Community, (2) External factors, (3) District-level factors, and (4) School-level factors.

**Community.** The community was determined to be a factor unto itself because it not only influenced the individual stages of the implementation process, it also influenced some the other factors. In this study, community was shown to be of influence on all factors, but particularly on external factors and district-level factors. Also, it was shown to be a target of influence from external factors, namely the advisory council. Although not as direct a relationship, community also influenced some of the school-level factors, such as principal leadership. The community, in turn, was influenced by their relationship with the external factors, district-level factors, and the outcomes of implementation. The community was shown to influence all phases of implementation, but that influence tended to diminish as the implementation advanced.

**External factors.** External factors were those that were considered to be out of the control of the district or school that exerted some amount of influence on the implementation process. At one point, community appeared to be an external factor; however, due to the influence the community had over both external and district-level factors, it was determined to be a separate factor. The external factors that emerged in this study were:

- The Foundation for the Education of Young Women
- The advisory council,
- Partnerships with organizations, and
- Resources.

These factors directly influenced the pre-implementation planning process, the campus preparation process, and the implementation of the campus model. External factors were found to have a direct influence on the community, as well. It could be argued that the external factors had a direct relationship with the implementation outcomes; however, the researcher found that the external factors directly impacted the model implementation, which, in turn, impacted student outcomes.

**District-level factors.** District-level factors were those considered to be within the scope and control of the school district, but not at the campus-level. As previously noted, the researcher considered listing community as a district-level factor; however, due to the influence community has over both district-level and external factors, it was determined to be a separate factor. The district-level factors that emerged in this study were:

- The Board of Trustees,
- Executive leadership support (Superintendent and other Executive Leaders),
- District support, and
- District systems.

District-level factors were determined to have a direct influence on both the pre-implementation planning and campus preparation stages of the implementation process. It was also noted that during the campus model implementation, the district-level factors directly impacted the school-level factors (e.g., district staff commitment influencing principal leadership). At first, it was determined that the district-level factors had a direct influence on outcomes, but the data actually showed that the district-level factors

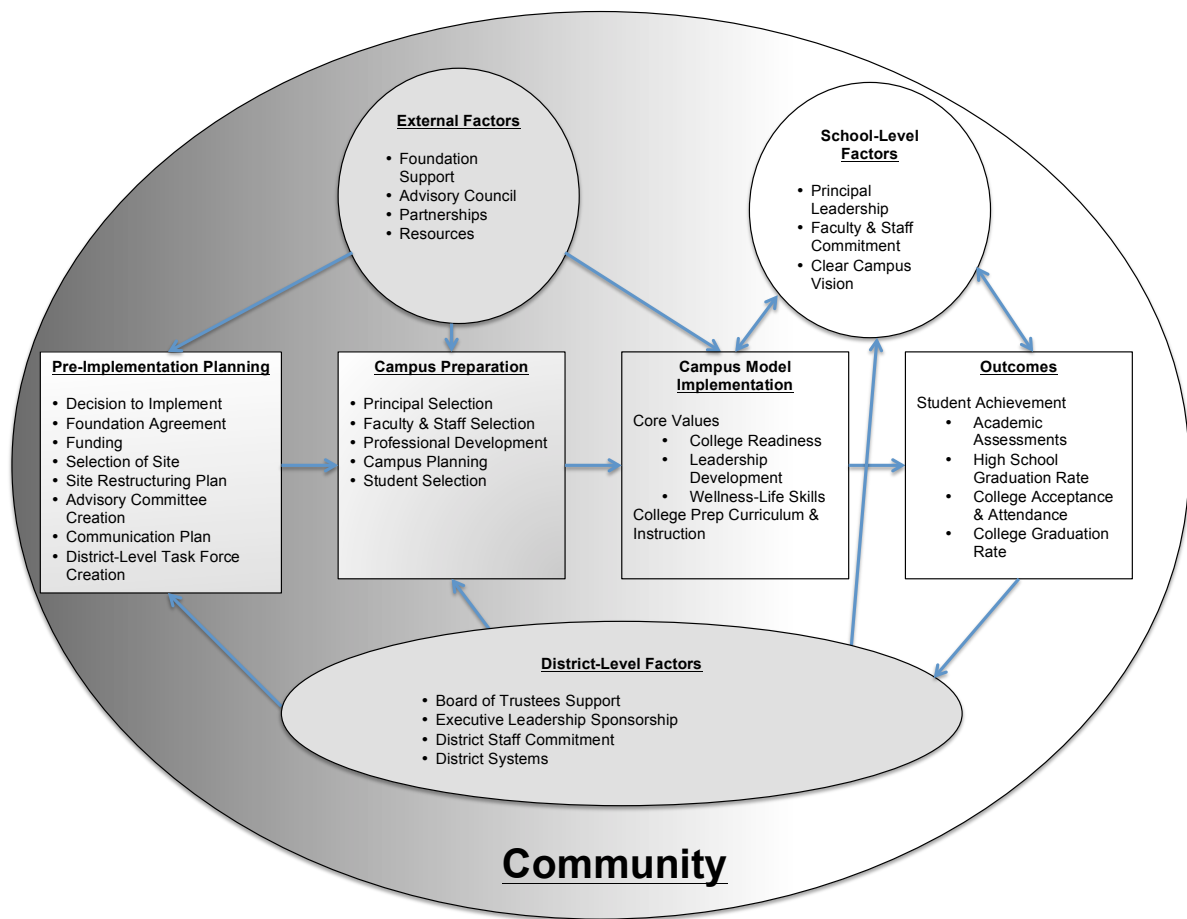
influenced school-level factors, which influenced outcomes; thus, there was not a direct relationship. It was also noted that student outcomes influenced the district-level factors.

**School-level factors.** The school-level factors were determined to be those that directly related to the campus. While the researcher considered listing parent support as a community factor, the data from the study suggested that the parent support was much more closely related to the day-to-day operations of the campus, thus, it was determined to be a school-level factor. School-level factors directly influenced by the outcomes of implementation and the campus model implementation itself. The school-level factors that emerged in this study were:

- Principal leadership,
- Faculty and staff commitment,
- Student motivation,
- Campus culture, and
- Parent support.

### **Intended Outcomes**

The intended outcomes of the implementation of an all-female, single-sex campus, relate to student academic achievement. The goal of the FEYW model is to raise student achievement in the areas of academic assessments, high school graduation rates, college acceptance and attendance, and college graduation rates.



**Figure 9: Theoretical Diagram: Implementation of Whole-School, All-Female, Single-Sex Reform**

## **Conclusions**

This research examined the factors that contributed to the successful implementation of an all-female, single-sex campus as a model of whole-school reform. Also, the research examined the successes and challenges experienced during the implementation process. Given the nature of the study, the following propositions are advanced:

1. The factors that impact the successful implementation of an all-female, single-sex campus are located within the school, district, external, and community. These factors are supported by research on whole-school reform: (1) Committed faculty and staff, (2) Principal leadership, (3) Coordination with district-level offices, (4) District support, and (5) Campus vision. Two additional factors emerged as contributions to existing literature: (1) Support from the board of trustees, and (2) Committed advisory council with strong community ties.
2. The successes experienced in this study were all directly related to the students, campus, parents, and community. These included student achievement and development, creating a safe and nurturing campus culture, and gaining parent and community support.
3. The challenges experienced in this study involved hiring the right staff, planning for sustainability of resources, moderating political challenges in the community, and educating parents to understand and support the expectations needed in a college-going culture.

The human capital offered by faculty, staff, administration, and parents on the campus are the most notable factors in the successful implementation. However, acquiring the human capital is also the greatest challenge, especially when it comes to finding and hiring staff members who believe in the model and who are willing to work hard to support it and a principal with the strength to lead the campus. The successes experienced on the campus largely relate to student outcomes associated with achievement and development and the campus culture needed to support those outcomes.

### **Implications for Practice**

Single-sex campuses in public school districts are growing as a practice, in part due to results from campuses like Ford Academy. For districts considering an all-female model, it is important to remember that each district is unique and that implementation processes must be defined by the context of the district. That being so, the findings from this study regarding the implementation at Ford Academy can inform the planning and implementation processes. By studying the factors that influenced implementation at Ford Academy, districts planning to implement this model can use the information generated by this study as a guide when considering the factors that may influence implementation in their own districts.

### **Implications for Future Research**

Due to the growth of this model, there are a rising number of opportunities to research and gain insight regarding the implementation of an all-female, single-sex public school as a model of whole-school reform. These include further study within Lonestar ISD and Ford Academy, as well as research in other districts.

Ford Academy is a small campus, but it is important to note that the six participants who lent their voices are not representative of all of the stakeholders in this study. Within Lonestar ISD, further research could include interviews and/or surveys with additional teachers, students, families, and other district-level staff, which may confirm, or refute, the findings in this study. The findings from this study represent the perspectives of specific individuals at a single point in time.

The criteria used for Ford Academy applies to other all-female public campuses in the state, thus, repeating this research with one or more of these campuses would allow for a comparison of findings across settings and contexts.

This study only addressed the implementation of an all-female, single-sex campus and did not include single-sex programs within coeducational settings. Therefore, replicating this study on a campus that offers single-sex programming within a coeducational campus would allow for comparison of findings across models of single-sex programming. Other areas of expansion include applying this methodology to an all-male setting, and researching how a district was able to gain parent and community support in the implementation process.

### **Concluding Thoughts**

“We can strengthen girls so that they will be ready. We can encourage emotional toughness and self-protection. We can support and guide them. But most important, we can change our culture. We can work together to build a culture that is less complicated and more nurturing, less violent and sexualized and more growth-producing. Our daughters deserve a society in which all their gifts can be developed and appreciated.”

Dr. Mary Pipher, *Reviving Ophelia*

The purpose of this research was to study the factors that contributed to the successful implementation of an all-female, single-sex campus as a model of whole



reform. This report would be incomplete without the inclusion of several candid remarks from the researcher. Although the passion and achievement seen at Ford Academy were indeed remarkable, it must be noted that there are many factors in this study that would result in the success of campus reforms in many settings besides single-sex campuses. The researcher questions whether or not the rigorous selection process for students or availability of programs and resources influenced the level of success seen at Ford Academy more than the model itself. This, of course, addresses concerns raised by opponents of single-sex reform who advance the notion that any research supporting the practice is not methodologically sound due to the influence of selection bias.

This study, however, did not seek to support or reject the practice of single-sex education, only to study the implementation on a campus with successful student outcomes. Although there were many factors that emerged through the data, this research can never truly capture the passion of the teachers and administrators involved with Ford Academy. They believe in what they do. They believe that their hard work is changing the lives of those girls. They believe that they are preparing these young women for the future by putting them on the path to graduate from a four-year university. They believe in the importance of developing confidence and leadership, and in nurturing the social and emotional growth of these girls. They believe in equipping these young ladies with the skills to make healthy decisions for their bodies and for their futures. If the voices of the participants and the researchers' observations are any indication, the faculty and staff are truly making their beliefs a reality at Ford Academy.

## APPENDIX A

### IRB Approval



#### OFFICE OF RESEARCH SUPPORT

#### THE UNIVERSITY OF TEXAS AT AUSTIN

*P.O. Box 7426, Austin, Texas 78713 · Mail Code A3200  
(512) 471-8871 · FAX (512) 471-8873*

FWA # 00002030

Date: 01/11/13

PI: Susan C Lofton

Dept: Educational Administration

Title: Perceptions of the Implementation of a Whole-School Reform  
Model: All-Female Single-Sex Education

Re: IRB Expedited Approval for Protocol Number 2012-10-0094

Dear Susan C Lofton:

In accordance with the Federal Regulations the Institutional Review Board (IRB) reviewed the above referenced research study and found it met the requirements for approval under the Expedited category noted below for the following period of time: 01/10/2013 to 01/09/2014. *Expires 12 a.m. [midnight] of this date.* If the research will be conducted at more than one site, you may initiate research at any site from which you have a letter granting you permission to conduct the research. You should retain a copy of the letter in your files.

Expedited category of approval:

1) Clinical studies of drugs and medical devices only when condition (a) or (b) is met. (a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review). (b) Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows: (a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or (b) from other adults and children<sup>2</sup>, considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml

per kg in an 8 week period and collection may not occur more frequently than 2 times per week.

3) Prospective collection of biological specimens for research purposes by non-invasive means.

Examples:

- (a) Hair and nail clippings in a non-disfiguring manner.
- (b) Deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction;
- (c) Permanent teeth if routine patient care indicates a need for extraction.
- (d) Excreta and external secretions (including sweat).
- (e) Uncannulated saliva collected either in an un-stimulated fashion or stimulated by chewing gum base or wax or by applying a dilute citric solution to the tongue.
- (f) Placenta removed at delivery.
- (g) Amniotic fluid obtained at the time of rupture of the membrane prior to or during labor.
- (h) Supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques.
- (i) Mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings.
- (j) Sputum collected after saline mist nebulization.

4) Collection of data through non-invasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications).

Examples:

- (a) Physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy.
- (b) Weighing or testing sensory acuity.
- (c) Magnetic resonance imaging.
- (d) Electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography.
- (e) Moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis). Note: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(4). This listing refers only to research that is not exempt.

X 6) Collection of data from voice, video, digital, or image recordings made for research purposes.

X 7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Note: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.

- X Use the attached approved informed consent document(s).

You have been granted a Waiver of Documentation of Consent according to 45 CFR 46.117 and/or 21 CFR 56.109(c)(1).

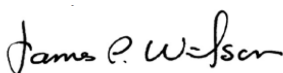
You have been granted a Waiver of Informed Consent according to 45 CFR 46.116(d).

**Responsibilities of the Principal Investigator:**

1. Report immediately to the IRB any unanticipated problems.
2. Submit for review and approval by the IRB all modifications to the protocol or consent form(s). Ensure the proposed changes in the approved research are not applied without prior IRB review and approval, except when necessary to eliminate apparent immediate hazards to the subject. Changes in approved research implemented without IRB review and approval initiated to eliminate apparent immediate hazards to the subject must be promptly reported to the IRB, and will be reviewed under the unanticipated problems policy to determine whether the change was consistent with ensuring the subjects continued welfare.
3. Report any significant findings that become known in the course of the research that might affect the willingness of subjects to continue to participate.
4. Ensure that only persons formally approved by the IRB enroll subjects.
5. Use only a currently approved consent form, if applicable. Note: Approval periods are for 12 months or less.
6. Protect the confidentiality of all persons and personally identifiable data, and train your staff and collaborators on policies and procedures for ensuring the privacy and confidentiality of subjects and their information.
7. **Submit a Continuing Review Application for continuing review by the IRB. Federal regulations require IRB review of on-going projects no less than once a year a reminder letter will be sent to you two months before your expiration date. If a reminder is not received from Office of Research Support (ORS) about your upcoming continuing review, it is still the primary responsibility of the Principal Investigator not to conduct research activities on or after the expiration date. The Continuing Review Application must be submitted, reviewed and approved, before the expiration date.**
8. Upon completion of the research study, a Closure Report must be submitted to the ORS.
9. Include the IRB study number on all future correspondence relating to this protocol.

If you have any questions contact the ORS by phone at (512) 471-8871 or via e-mail at [orssc@uts.cc.utexas.edu](mailto:orssc@uts.cc.utexas.edu).

Sincerely,



James Wilson, Ph.D. Institutional Review Board Chair

## APPENDIX B

### Informed Consent for Interviews

STUDY NUMBER: 2012-10-0094

Approval Date: 1/10/2013

Expires: 1/9/2014

### Consent for Participation in Research

*Description of Study: This study will document the perceptions of leaders and teachers regarding the implementation of all-female, single-sex education as a whole-school reform model. This research will examine the participants' views of the factors that influence successful implementation of this model.*

My signature on the following page of this form indicates that I have read the information provided and have decided to participate in the project titled, "Perceptions of the Implementation of a Whole-School Reform Model: All-Female Single- Sex Education".

I agree to the conditions listed below with the understanding that I may withdraw my participation from the project at any time, and that I may choose not to answer any questions that I do not want to answer. I understand my participation is completely voluntary.

1. *Participant Activities: Participants will either be asked to participate in an interview process. Interview participants will be asked to participate in two, semi-structured interviews of approximately 30 minutes in length (each).*
2. *Confidentiality of Responses: This study is confidential. All identifying information will be separated from participant responses. Respondents will be assigned a code that the researcher will use to link them to their responses. Data from the study will be stored in a locked file. To maintain confidentiality of the data, code books and consent forms will be stored in a separate locked file. If you choose to participate in this study, you may choose to be audio recorded. Any audio recordings will be stored securely and only the research team will have access to the recordings. Recordings will be kept for one year and then erased. The data resulting from your participation may be used for future research or be made available to other researchers for research purposes not detailed within this consent form.*
3. *Reporting of Data from the Study: Responses from this research will be analyzed and reported in the findings section of the published dissertation (treatise) entitled "Perceptions of the Implementation of a Whole-School Reform Model: All Female Single-Sex Education".*
4. *Potential Risks, Inconveniences, & Benefits of Participation: Potential risks associated with participation in this study are unlikely and very low. There is little likelihood of any physical risk as a result of participation in this research project as participants are not asked to perform any tasks that could result in physical harm. Participation carries a very low psychological risk and would only result if participants become upset by questions that ask them to think about their experiences during the implementation of all-female, single-sex education as a whole-school reform model. Potential inconveniences associated with participation in this study are very low. The researcher will meet with each interview participants at the time preferred, as well as at a location that offers the most convenience. Participants may benefit by contributing to a greater awareness within the educational community of the factors that influence successful implementation of all-female, single-sex campuses as a whole-school reform model. There is no monetary compensation for participation in this study.*

Your consent is optional. Your decision whether or not to participate will not prejudice your present or future relations with the University of Texas at Austin, or \_\_\_\_\_ ISD. If you decide to participate, you are free to discontinue participation at any time without prejudice. I can get information about the project and copies of any surveys or tests used during the study by contacting Suzy Lofton at (512) 529-2034 or [suzy.lofton@utexas.edu](mailto:suzy.lofton@utexas.edu).

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

This study has been reviewed and approved by The University Institutional Review Board and the study number is 2012-10- 0094. I understand that while this project has been reviewed by \_\_\_\_\_ ISD and by the principal at my school, \_\_\_\_\_ ISD is not conducting project activities.

Note from the Researcher: You are making a decision whether to participate in this study. Your signature indicates that you have read the information provided above and have decided to participate in the study. If you later decide that you wish to withdraw your consent for participation in the study, simply tell me. You may discontinue your participation at any time.

Contact Information:

Suzy Lofton  
Principal Researcher  
(512) 529-2034  
[suzy.lofton@utexas.edu](mailto:suzy.lofton@utexas.edu)

Dr. Ruben Olivarez  
Supervising Faculty  
The University of Texas at Austin  
[rolivarez@austin.utexas.edu](mailto:rolivarez@austin.utexas.edu)

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

You will be given a copy of this information to keep for your records.

\_\_\_\_\_ I agree to be audio recorded.

\_\_\_\_\_ I do not want to be audio recorded.

\_\_\_\_\_ Printed Name of Participant

\_\_\_\_\_ Participant Signature

Date: \_\_\_\_\_

As a representative of this study, I have explained the purpose, procedures, benefits, and the risks involved in this research study.

\_\_\_\_\_ Printed Name of Person Obtaining Consent

\_\_\_\_\_ Signature of Person Obtaining Consent

Date: \_\_\_\_\_

**Please keep this page for your records.**

## APPENDIX C

### Informed Consent for Open-Ended Questionnaire

STUDY NUMBER: 2012-10-0094

Approval Date: 1/10/2013

Expires: 1/9/2014

### Consent for Participation in Research

*Description of Study: This study will document the perceptions of leaders and teachers regarding the implementation of all-female, single-sex education as a whole-school reform model. This research will examine the participants' views of the factors that influence successful implementation of this model.*

My participation indicates that I have read the information provided and have decided to participate in the project titled, "Perceptions of the Implementation of a Whole-School Reform Model: All-Female Single-Sex Education".

I agree to the conditions listed below with the understanding that I may withdraw my participation from the project at any time, and that I may choose not to answer any questions that I do not want to answer. I understand my participation is completely voluntary.

- 1. Participant Activities: Participants will either be asked to participate in an open-ended questionnaire. Open-ended survey participants will be asked to complete one open-ended response survey administered through a secure online system of approximately 10 questions.*
- 2. Confidentiality of Responses: This study is confidential. All identifying information will be separated from participant responses. Respondents will be assigned a code that the researcher will use to link them to their responses. Data from the study will be stored in a locked file. To maintain confidentiality of the data, code books and consent forms will be stored in a separate locked file. The data resulting from your participation may be used for future research or be made available to other researchers for research purposes not detailed within this consent form.*
- 3. Reporting of Data from the Study: Responses from this research will be analyzed and reported in the findings section of the published dissertation (treatise) entitled "Perceptions of the Implementation of a Whole-School Reform Model: All Female Single-Sex Education".*
- 4. Potential Risks, Inconveniences, & Benefits of Participation: Potential risks associated with participation in this study are unlikely and very low. There is little likelihood of any physical risk as a result of participation in this research project as participants are not asked to perform any tasks that could result in physical harm. Participation carries a very low psychological risk and would only result if participants become upset by questions that ask them to think about their experiences during the implementation of all-female, single-sex education as a whole-school reform model. Potential inconveniences associated with participation in this study are very low. Open-ended survey participants will provide responses electronically via secure survey administration software for ease of access and to ensure the confidentiality of participant responses. Participants may benefit by contributing to a greater awareness within the educational community of the factors that influence successful implementation of all-female, single-sex campuses as a whole-school reform model. There is no monetary compensation for participation in this study.*

Your consent is optional. Your decision whether or not to participate will not prejudice your present or future relations with the University of Texas at Austin, or \_\_\_\_\_ ISD. If you decide to participate, you are free to discontinue participation at any time without prejudice. I can get information about the project and copies of any surveys or tests used during the study by contacting Suzy Lofton at (512) 529-2034 or [suzy.lofton@utexas.edu](mailto:suzy.lofton@utexas.edu).

For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

This study has been reviewed and approved by The University Institutional Review Board and the study number is 2012-10- 0094. I understand that while this project has been reviewed by \_\_\_\_\_ ISD and by the principal at my school, \_\_\_\_\_ ISD is not conducting project activities.

Note from the Researcher: You are making a decision whether to participate in this study. Returning the survey indicates that you have read the information provided above and have decided to participate in the study. If you later decide that you wish to withdraw your consent for participation in the study, simply tell me. You may discontinue your participation at any time.

Contact Information:

Suzy Lofton  
Principal Researcher  
(512) 529-2034  
[suzy.lofton@utexas.edu](mailto:suzy.lofton@utexas.edu)

Dr. Ruben Olivarez  
Supervising Faculty  
The University of Texas at Austin  
[rolivarez@austin.utexas.edu](mailto:rolivarez@austin.utexas.edu)

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You voluntarily agree to participate in this study. You are not waiving any of your legal rights.

You will be given a copy of this information to keep for your records.

**Please keep this page for your records.**



## **APPENDIX D**

### **Guided Interview Protocol**

What is your current job assignment?

What was your assignment during the implementation year of the single-sex model on this campus?

Describe your involvement in the implementation of the single-sex model on this campus.

Walk me through the steps this campus took during the implementation of the single-sex model on this campus.

Looking back on your experience, what do you think are the necessary steps that schools should take when implementing an all-female campus?

Are there any steps you would omit? Why?

Are there any steps you would add? Why?

Are there any steps you think should be changed?

What were some of the successes experienced on this campus during the implementation process.

Why do you consider them successes?

What do you think contributed to these successes?

What were some of the challenges experienced on this campus during the implementation process?

Why do you consider them challenges?

What do you think contributed to these challenges?

Do you have any thoughts that you think might add to this research?

## **APPENDIX E**

### **Open-Ended Questionnaire Questions**

Describe the role of teacher commitment in the successful implementation of an all-female campus.

Describe the role of resources (time for collaboration, professional development, etc.) in the successful implementation of an all-female campus.

Describe the elements of campus culture that contributed to the successful implementation of an all-female campus.

Describe the role of principal leadership in the successful implementation of an all-female campus.

Describe the role of parent/community involvement in the successful implementation of an all-female campus.

Describe the role of district-level supports (central administration, advisory board, etc.) in the successful implementation of an all-female campus.

Describe the role an external network (such as the Foundation for the Education of Young Women) in the successful implementation of an all-female campus.

What do you perceive to be the successes experienced by your campus during the implementation process?

What are challenges experienced by your campus during the implementation process?

Do you have any additional thoughts that you think might add to this research?

**APPENDIX F**  
**List of Documents Reviewed by the Researcher**

Campus AEIS Reports  
Campus Improvement Plan  
Foundation for the Education of Young Women [FEYW] Website  
Campus Website  
District Website  
Girls Inc. Website  
Advancement Via Individual Determination [AVID] Website  
PREP-USA Website  
Memorandum of Understanding between Lonestar ISD and the FEYW  
Amendment to the Memorandum of Understanding  
Lonestar ISD Board Agendas  
Lonestar ISD Board Agenda Summary Forms  
Lonestar ISD Board Minutes  
Campus Professional Development Calendars  
Newspaper Articles  
Campus Student Survey Results  
Campus Senior Seminar Expectations  
Campus Student/Parent Handbook  
Campus Informational Brochure  
Campus Information Video  
Campus Bell Schedule  
Campus Supply List  
Campus Eligibility Criteria  
Campus Student Application Process Timeline and Checklist  
Campus Student Application  
Campus Parent Application (To Be Submitted with Student Application)  
Teacher Recommendation Forms (To Be Submitted with Student Application)

## **APPENDIX G**

### **Coding Categories that Emerged During Open Coding**

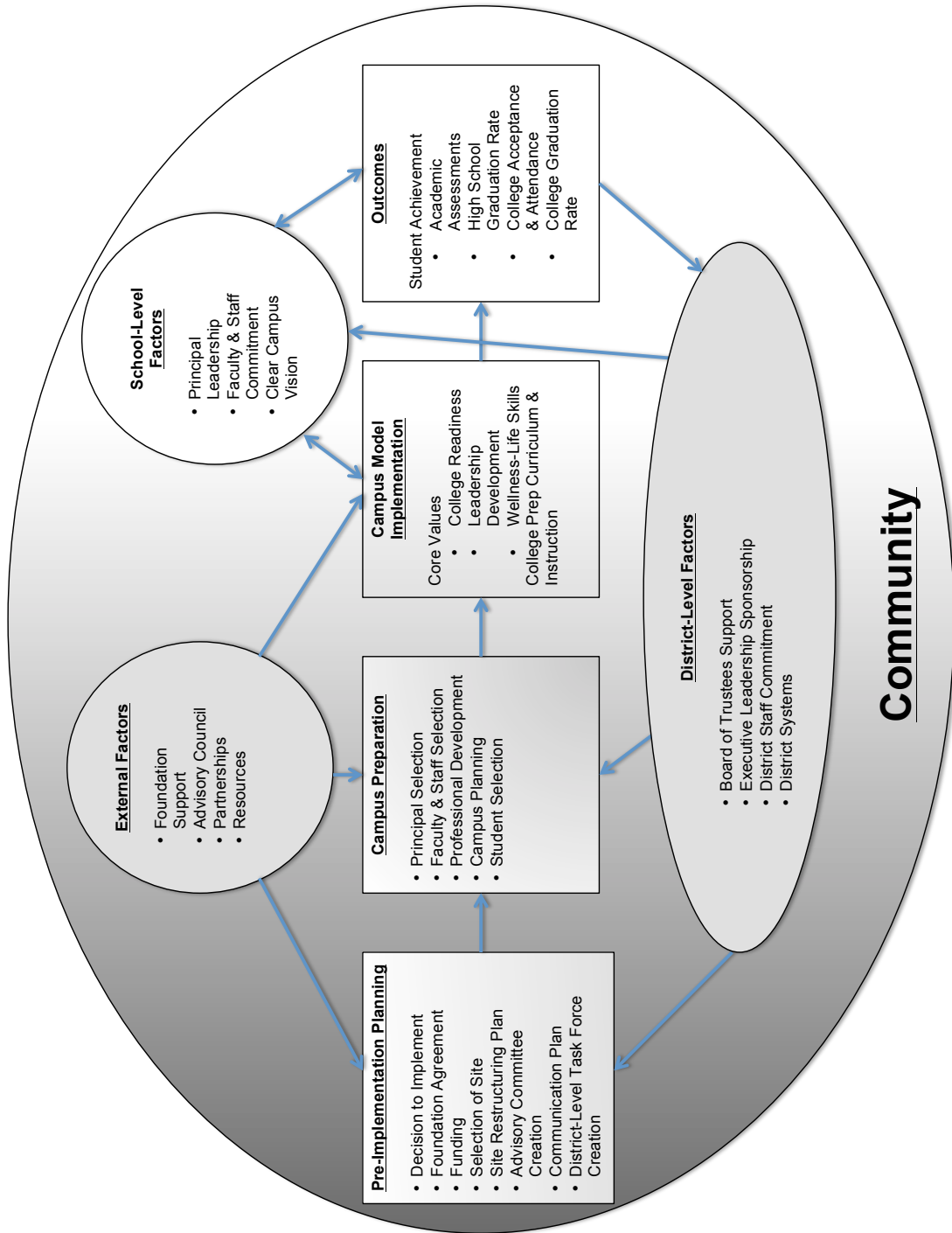
#### **Coding Categories that Emerged During Open Coding**

AC	Advisory Council
C	Community
CC	Campus Culture
DC	District Commitment (Later changed to District Support)
DS	District Systems
EL	Executive Leadership Support
FC	Faculty & Staff Commitment
FW	Foundation (FEYW)
PL	Principal Leadership
PS	Parent Support
SB	School Board
SC	Student Characteristics
R	Resources

# APPENDIX H

## Theoretical Diagram

### Implementation of Whole-School, All-Female, Single-Sex Reform



## References

- Advancement Via Individual Determination [AVID]. (2013). *What is avid?* Retrieved from [http://www.avid.org/abo\\_whatisavid.html](http://www.avid.org/abo_whatisavid.html).
- American Association of University Women [AAUW]. (1998) Separated by sex: A critical look at single-sex education for girls. AAUW: Washington, DC.
- Bigler, R. S., & Signorella, M. L. (2011). Single-sex education: New perspectives and evidence on a continuing controversy. *Sex Roles*, 65, 659-669.
- Berends, M., Kirby, S., Naftel, S., & McKelvey, C. (2001). *Implementation and performance in New American Schools: Three years into scale-up*. RAND: Santa Monica, CA.
- Berends, M., Bodilly, S.J., Kirby, S. (2002). *Facing the challenges of whole-school reform: New American schools after a decade*. RAND: Santa Monica, CA.
- Boyer, E. L. (1990). What to teacher, how to teach it, and to whom. In S. B. Bachaach (Ed.), *Education reform: Making sense of it all* (30-38). Boston, MA: Allyn & Bacon.
- Bracey, G. (2006). Single-sex education: No easy answer. *Principal Leadership*, December 5, 2006, 52-55.
- Bradley, K. B. (2006). Controversy and debate surround the implementation of single-gender education. Retrieved from [http://www.education.com/print/Ref\\_Controversy\\_Debate/](http://www.education.com/print/Ref_Controversy_Debate/)

- Bradley, K. B. (2009). The impact of single-sex education on the performance of first and second grade public school students. *Georgia Educational Researcher*, 7(1). Retrieved from [http://coefaculty.valdosta.edu/lshmert/gera/vol\\_7\\_no\\_1.htm](http://coefaculty.valdosta.edu/lshmert/gera/vol_7_no_1.htm).
- Carlson, R. V., & Buttram, J. L. (Eds.). (2004). *Case studies of rural schools implementing comprehensive school reform models*. Paper presented at the American Educational Research Association Annual Conference. San Diego, CA.
- Carnegie Corporation, Forum on Education and the Economy. (1986). *A nation prepared: Teachers for the 21<sup>st</sup> century* (Report on the Task Force on Teaching as Profession). Washington, DC.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3-21.
- Chadwell, D. W. (2010). *A gendered choice: Designing and implementing single-sex programs and schools*. SAGE Publications: Thousand Oaks, CA.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE Publications.
- Datnow, A., Hubbard, L., & Mehan, H. (1998). *Educational reform implementation: A co-constructed process*. Center for Research on Education, Diversity, & Excellence, Santa Cruz: CA.
- Datnow, A. (2000). Power and politics in the adoption of school reform models. *Educational Evaluation and Policy Analysis*, 22(4), 357-374.
- Datnow, A., & Stringfield, S. (2000). Working together for reliable school reform. *Journal of Education for Students Placed At Risk*, 5(1 & 2), 183-204.

- Datnow, A., Hubbard, L., & Conchas, G. Q. (2001). How context mediates policy: The implementation of single gender public schooling in California. *Teacher College Record, 103*(2), 184-206.
- Datnow, A., Borman, G. D., Stringfield, S., Overman, L. T., & Castellano, M. (2003). Comprehensive school reform in culturally and linguistically diverse contexts: Implementation and outcomes from a four-year study. *Educational Evaluation and Policy Analysis, 25*(2), 143-170.
- Desimone, L. (2002). How can comprehensive school reform models be successfully implemented? *Review of Educational Research, 72*(3), 433-479.
- Education Week. (2012, January 18). *Study finds single-sex schools benefit some but not all: Caribbean study may offer insights for United States*. Retrieved from Academic OneFile. (Gale Document Number: GALEA278407272).
- Education Week. (2012, June 5). *ACLU sues states on single-sex classes*. Retrieved from Academic OneFile.
- Elliot, L. (2011). Single-sex education and the brain. *Sex Roles*. doi: 10.1007/s11199-011-0037-y.
- Federal Register. (2007, June 11). *Elementary and secondary education act, Implementation, Single-sex classes and schools, Guidelines*. U.S. Government: Washington, DC.
- Fink, A. (2009). *How to conduct surveys: A step-by-step guide* (4<sup>th</sup> ed.). Thousand Oaks, CA: SAGE Publications.



- Ford Academy for Young Women. (2012). *Ford academy for young women* [Brochure].<sup>1</sup>
- Ford Neighborhood Community Development Corporation. 2012. Website.<sup>1</sup>
- Foundation for the Education of Young Women (2012a). *Our core values*. Retrieved from <http://www.feyw.org/content/our-core-values>.
- Foundation for the Education of Young Women (2012b). *Our history*. Retrieved from <http://www.feyw.org/content/our-history>.
- Fullan, M. (2009). Large-scale reform comes of age. *Journal of Educational Change*. doi: 10.1007/s10833-00909108-z.
- Geek Squad Summer Academy. (2013). Retrieved from <http://geeksquadacademy.com/summeracademy/>.
- Girls, Inc. (2013). *About girls inc*. Retrieved from <http://www.girlsinc.org/about/index.html>.
- Glasser, H. M. (2012). Hierarchical deficiencies: Constructed differences between adolescent boys and girls in a public school single-sex program in the United States. *Journal of Adolescent Research*, 27(3), 377-400.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-607.
- Guba, E., & Lincoln, Y. (1981). *Effective evaluation*. San Francisco: Jossey-Bass.
- Hanover Research. (2012). *Single-sex middle schools*. Washington, DC.

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<sup>1</sup> References with information that may result in deductive disclosure have been masked to protect the confidentiality of participants.

- Hayes, A. R., Pahlke, E. E., & Bigler, R. S. (2010). The efficacy of single-sex education: Testing for selection and peer quality effects. *Sex Roles*. doi: 10.1007/s11199-010-9903-2.
- Herr, K., & Arms, E. (2004). Accountability and single-sex schooling: A collision of reform agendas. *American Educational Research Journal*, 41 (3), 527-555.
- Hoffman, B. H., Badgett, B. A., & Parker, R. P. (2008). The effect of single-sex instruction in a large, urban, at-risk high school. *The Journal of Educational Research*, 102(1), 15-35.
- Hubbard, L., & Datnow, A. (2005). Do single-sex schools improve the education of low-income and minority students? An investigation of California's public single-gender academies. *Anthropology & Education Quarterly*, 36(2), 115-131.
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632-1641.
- Kirst, M. W. (1990). The recent state education reform in the United States: Looking Backward and forward. In S. B. Bacharach (Ed.), *Education reform: Making sense of it all* (20-29). Boston, MA: Allyn & Bacon.
- Knox, H. (1971). *A history of educational research in the United States*. Washington, DC: National Institute of Education.
- Lee, S. W. (Ed.). (2005). School reform. *Encyclopedia of school psychology* (478-483). Thousand Oaks, CA: SAGE Publications, Inc.
- Lincoln, Y. S., & Guba, E. (1985). *Naturalistic inquiry*. Beverley Hills, CA: SAGE Publications.

- Mael, F. A. (1998). Single-sex and coeducational schooling: Relationships to socioemotional and academic development. *Review of Educational Research*, 68(2), 101-129.
- Mael, F., Alonso, A., Gibson, G., Rogers, K., & Smith, M. (2005). Single-sex versus coeducational schooling: A systematic review (Report No. 2005-01). Washington, DC: U. S. Department of Education, Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service. Retrieved from <http://www2.ed.gov/rschstat/eval/other/single-sex/single-sex.pdf>.
- McChesney, J. & Hertling, E. (2000, April). The path to comprehensive school reform. *Educational Leadership*, 10-15.
- McDowell, K. C. (2006). *Legal issues in education: Title IX*. Indiana Department of Education, General Counsel, 2-5.
- Merriam, S. B. (2009). *Qualitative research: A guide to the design and implementation*. San Francisco, CA: Jossey-Bass.
- Meyer, P. (2008). Learning separately: The case for single-sex schools. *Education Next*, (Winter). 11-21.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2<sup>nd</sup> ed.). Thousand Oaks, CA: SAGE Publications.
- National Association for Single Sex Public Educators [NASSPE]. (2012). Retrieved from <http://www.singlesexschools.org>.
- National Coalition for Women and Girls in Education. (2008). *Title IX at 35: Behind the headlines*. American Association of University Women: Washington, DC.

- Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches* (6<sup>th</sup> ed.). Boston, MA: Allyn & Bacon.
- O'Brien, Anne. (2012, February 10). A stop on the road to ESEA reauthorization. Retrieved from <http://www.learningfirst.org/stop-road-esea-reauthorization>.
- Patterson, B. A. (2012, February). Separating the boys from the girls. *Phi Delta Kappan*. P. 37-41.
- Patterson, M. M., & Pahlke, E. (2010). Student characteristics associated with girls' success in a single-sex school. *Sex Roles*. doi: 10.1007/s11199-010-9904-1.
- Patton, M. Q. (1985). Quality in qualitative research: Methodological principles and recent developments. Invited address to Division J of the American Educational Research Association. Chicago, IL.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2<sup>nd</sup> ed.). Newberry Park, CA: SAGE Publications.
- Peurach, D. J. (2012, February 29). Improving large-scale school reform. *Education Week*. Retrieved from: <http://www.edweek.org/ew/articles/2012/02/29/22peurach.h31.html>.
- Piechura-Couture, K., Heins, E., & Tichenor, M. (2009). The boy factor: Can single-gender classes reduce the over-representation of boys in special education? *Journal of Instructional Psychology*, 38(4), 255-263.
- PREP-USA. (2013). *PREP mission statement*. Retrieved from <http://www.prep-usa.org/portal/main/generaldetail.asp?ID=296>.
- Protheroe, N. (2009). Single-sex classrooms. *Principal (May/June)*, 32-35.

- Public Education Network. (2011). Making your voices heard: What does NCLB reauthorization mean? Retrieved from [http://www.publiceducation.org/nclb\\_main/Reauth\\_What\\_It\\_Means.asp](http://www.publiceducation.org/nclb_main/Reauth_What_It_Means.asp).
- Riordan, C. (1998). The future of single-sex schools. In American Association of University Women Educational Foundation [AAUWEF] (Ed.), *Separated by Sex: A critical look at single-sex education for girls* (53-62). AAUWEF: Washington, DC.
- Rogers, K. B. (2008a). For better or worse: Classroom dynamics in single-sex science classes. In F. R. Spielhagen (Ed.), *Debating single-sex education*, (pp. 83-115). Rowman & Littlefield: Lantham, MD.
- Rogers, K. B. (2008b). Now what? Practical implications. In F. R. Spielhagen (Ed.), *Debating single-sex education*, (pp. 83-115). Rowman & Littlefield: Lantham, MD.
- Ross, S. M., Henry, D., Phillipsen, L., Evans, K., Smither, L., & Bugey, T. (1997a). Matching restructuring programs to schools: Selection, negotiation, and preparation. *School Effectiveness and School Improvement* (8)1, 45-71.
- Ross, S. M., Troutman, A., Horgan, D., Maxwell, S., Laitinen, R., & Lowther, D. (1997b). The success of schools in implementing eight restructuring designs: A synthesis of first-year evaluation outcomes. *School Effectiveness and School Improvement* (8)1, 95-124.
- Rowan, B., Barnes, C., & Camburn, E. (2004). Benefiting from comprehensive school reform: A review of research on CSR implementation. In C. Cross (Ed.), *Putting*

- the Pieces Together* (1-52). National Clearinghouse for Comprehensive School Reform: Washington, DC.
- Rowan, B., & Miller, R. J. (2007). Organizational strategies for promoting instructional change: Implementation dynamics in schools working with comprehensive school reform providers. *American Educational Research Journal* (44)2, 252-297.
- Rushnet, N.C., Flaherty, J., Smith, A. (2004). Longitudinal assessment of comprehensive school reform program implementation and outcomes. U.S. Department of Education, Policy and Program Studies Service: Washington, DC.
- Rutherford, C. (2009). Planning to change: Strategic planning and comprehensive school reform. *Educational Planning* (18)1, 1-7.
- Salamone, R. C. (2003). *Same, different, equal: Rethinking single-sex schooling*. Yale University: New Haven, CT.
- Spielhagen, F. R. (2006, April). How tweens view single-sex classes. *Educational Leadership*, p. 68-72.
- Stake, R. E. (1981) Case study methodology: An epistemology advocacy. In W.W.Welsh (Ed.). *Case study methodology in educational evaluation*. Proceedings of the 1981 Minnesota Evaluation Conference. Minnesota Research and Evaluation Centre: Minneapolis, MN.
- Stowe, L. G. (1991). Should physics classes be single-sex. *The Physics Teacher*, 380-381.
- Sukhnandan, L., Lee, B., & Kelleher, S. (2000). An investigation into gender differences in achievement, phase 2: School and classroom strategies. National Foundation for Educational Research. Retrieved from

- <http://www.canterbury.ac.uk/education/protected/spss/docs/gtc-gender-differences-achievement.pdf>.
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: SAGE Publications.
- Texas Department of State Health Services. (2006). Metropolitan statistical areas with population by county, 2006. Retrieved from [http://www.dshs.state.tx.us/chs/info/info\\_metro.shtm](http://www.dshs.state.tx.us/chs/info/info_metro.shtm).
- Thiers, N. (2006, April). Do single-sex classes raise academic achievement? *Educational Leadership*. p. 70.
- United States Department of Education. (2002). *Comprehensive School Reform (CSR) Program Guidance*. Retrieved from <http://www.ed.gov/offices/OESE/compreform/guidance2000.html>.
- United States Department of Education. (2004). Guide to No Child Left Behind. Retrieved from <http://www2.ed.gov/nclb/overview/intro/guide/guide.pdf>.
- United States Department of Education. (2004, September 15). Elementary & secondary education act – Part F. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/pg13.html>.
- United States Department of Education. (2005). *Single-sex versus coeducational schooling: A systematic review*. Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service: Washington, DC.
- United States Department of Education. (2006). 34 CFR Part 106: Nondiscrimination on the basis of sex in education programs or activities receiving federal financial assistance. *Federal Register*, 71(206), 62530-62543.

- United States Department of Education. (2008). *Early implementation of public single-sex schools: Perceptions and characteristics*. Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service: Washington, DC.
- United States Department of Education. (2009, November 12). Comprehensive school reform program. Retrieved from <http://www2.ed.gov/programs/compreform/index.html>.
- Vernez, G., Karam, R., Mariano, L. T., & DeMartini, C. (2006). *Evaluating comprehensive school reform models at scale: Focus on implementation*. RAND: Santa Monica, CA.
- Warrington, M., & Younger, M. (2003). 'We decided to give it a twirl': single-sex teaching in English comprehensive schools. *Gender and Education*, 15(4), 339-350.
- Williams Harris, J. S. (2009). *Teachers' perceptions of single-gender education and its implementation in a public middle school*. (Doctoral dissertation). Retrieved from Proquest Dissertation & Theses. (UMI number: 3374143)
- Willis, J. W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. Thousand Oaks, CA: SAGE Publications.
- Yee, G., & Cuban, L. (1996). When is tenure long enough? A historical analysis of superintendent turnover and tenure in urban school districts. *Educational Administration Quarterly*, 32(1), 615-641.
- Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: SAGE Publications.



## **VITA**

Susan Claire Lofton, daughter of James and Elizabeth, was born and raised on the Eastern Shore of Virginia. She graduated from Nandua High School in Onley, Virginia in 1998. She attended Old Dominion University in Norfolk, Virginia and earned a Bachelor of Arts degree in Political Science in 2002. She continued at Old Dominion University to obtain her teaching certification while teaching United States History in the Norfolk Public Schools. Upon completion of her teaching certification, Suzy spent a year teaching and coaching cheerleading in Louisiana. In 2005, she relocated to Austin, Texas and continued teaching and coaching in the Manor Independent School District until 2008. Upon entry into her master's program at Stephen F. Austin State University in Nacogdoches, Texas, Suzy transitioned into a campus administrator position for in the Manor Independent School District. In 2009, she became the principal of Manor Excel Academy, completing her Master's of Education degree that year. In 2010, she was accepted into Cohort 14 of the Educational Administration doctoral program at Stephen F. Austin State University and relocated to Tyler, Texas where she served as the Associate Principal of Instruction at Robert E. Lee High School in the Tyler Independent School District. Upon her acceptance into the Cooperative Superintendency Program Cohort 22 at the University of Texas at Austin in 2011, Suzy returned to Austin to continue her doctoral degree in Educational Administration, which she earned in 2013. Currently, she is employed by the Comal Independent School District where she serves as the Director of Advanced Academics & Counseling.

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